

This document gives pertinent information concerning the reissuance of the VPDES Permit listed below. This permit is being processed as a Minor, Municipal permit. The discharge results from the operation of a 0.004 MGD wastewater treatment plant. This permit action consists of updating the WQS and updating boilerplate. The effluent limitations and special conditions contained in this permit will maintain the Water Quality Standards of 9 VAC 25-260-00 et seq.

1. Facility Name and Mailing Address: Lightfoot Elementary School
Wastewater Treatment Plant
200 Dailey Drive
Orange, VA 22960

Facility Location: 11360 Zachary Taylor Highway
Unionville, VA 22567

Facility Contact Name: Mr. Larry A. Massie,
Superintendent
Telephone Number: 540-661-4550
2. Permit No.: VA0062961

Expiration Date of previous permit: January 18, 2009

Other VPDES Permits associated with this facility: None

Other Permits associated with this facility: None

E2/E3/E4 Status: N/A
3. Owner Name: Orange County School Board

Owner Contact/Title: Mr. Larry A. Massie,
Superintendent
Telephone Number: 540-661-4550
4. Application Complete Date: November 5, 2008

Permit Drafted By: Joan C. Crowther
Date Drafted: May 28, 2009

Draft Permit Reviewed By: Alison Thompson
Date Reviewed: May 28, 2009

Public Comment Period : Start Date: July 23, 2009
End Date: August 24, 2009
5. Receiving Waters Information: See Attachment 1 for the Flow Frequency Determination

Receiving Stream Name : Riga Run, UT

Drainage Area at Outfall: 0.74 sq.mi.
River Mile: 0.017

Stream Basin: York River
Subbasin: N/A

Section: 3
Stream Class: III

Special Standards: None
Waterbody ID: VAN-F07, Y017

7Q10 Low Flow: 0.0 MGD
7Q10 High Flow: 0.0 MGD

1Q10 Low Flow: 0.0 MGD
1Q10 High Flow: 0.0 MGD

Harmonic Mean Flow: 0.0 MGD
30Q5 Flow: 0.0 MGD

303(d) Listed: No
30Q10 Flow: 0.0 MGD

TMDL Approved: Yes
Date TMDL Approved: *Ecoli* - EPA 11/4/05
PCB Fish Tissue due by 2018
6. Statutory or Regulatory Basis for Special Conditions and Effluent Limitations:

<input checked="" type="checkbox"/> State Water Control Law	<input checked="" type="checkbox"/> EPA Guidelines
<input checked="" type="checkbox"/> Clean Water Act	<input checked="" type="checkbox"/> Water Quality Standards
<input checked="" type="checkbox"/> VPDES Permit Regulation	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> EPA NPDES Regulation	
7. Licensed Operator Requirements: Class IV

8. Reliability Class: Class II

9. Permit Characterization:

<input type="checkbox"/> Private	<input type="checkbox"/> Effluent Limited	<input type="checkbox"/> Possible Interstate Effect
<input type="checkbox"/> Federal	<input checked="" type="checkbox"/> Water Quality Limited	<input type="checkbox"/> Compliance Schedule Required
<input type="checkbox"/> State	<input type="checkbox"/> Toxics Monitoring Program Required	<input type="checkbox"/> Interim Limits in Permit
<input checked="" type="checkbox"/> POTW	<input type="checkbox"/> Pretreatment Program Required	<input type="checkbox"/> Interim Limits in Other Document
<input checked="" type="checkbox"/> TMDL		

10. Wastewater Sources and Treatment Description:

The wastewater treatment plant consists of a grease trap, 2 in-line septic tanks (1- 4,000 gallon and 1-1,000 gallon) and pump station with 2 submersible pumps. The wastewater then flows through a bar screen, into a 2,000 gallon extended aeration basin, secondary clarifier, tablet chlorination, tablet dechlorination, and diffuse post aeration.

See Attachment 2 for a facility schematic/diagram.

TABLE 1 – Outfall Description

Outfall Number	Discharge Sources	Treatment	Design Flow	Outfall Latitude and Longitude
001	Domestic Wastewater	See Item 10 above.	0.004 MGD	38° 14' 51" N 77° 57' 12" W
See Attachment 3 for USGS Topographic Map: Lahore (DEQ #170B)				

11. Sludge Treatment and Disposal Methods:

The aerobic digested sludge is pumped and hauled by an independent contractor to the Massaponax Wastewater Treatment Plant (VA0025658) in Spotsylvania County, Virginia for disposal.

12. Discharges, Intakes, Monitoring Stations, Other Items in Vicinity of Discharge

TABLE 2

Identification Number	Description of discharges, DEQ Ambient Water Quality Monitoring in the Vicinity of the Lightfoot Elementary School's Discharge
VA0060330	Unionville Elementary School – Discharges into an unnamed tributary to Riga Run (38° 15' 43.78" / 77° 57' 5.18")
8-RIG004.52	Riga Run - DEQ Ambient Water Quality Monitoring at Route 650 Bridge (38° 14' 24" / 77° 56' 23") Samples collected in 1999-2000 and 2006.

13. Material Storage:

TABLE 3 - Material Storage		
Materials Description	Volume Stored	Spill/Stormwater Prevention Measures
Chlorine Tablets	2 – 5 gallon buckets	Stored in covered container in locked storage building
Dechlorination Tablets	2 – 5 gallon buckets	Stored in covered container in locked storage building.

14. Site Inspection: Performed by Terry Nelson, DEQ Water Inspector on April 14, 2009. (see Attachment 4).

15. Receiving Stream Water Quality and Water Quality Standards:a) Ambient Water Quality Data

There is no monitoring data for the receiving stream, unnamed tributary to Riga Run. The nearest downstream monitoring station is DEQ ambient water quality monitoring station 8-RIG004.52, located on Riga Run at the Route 650 bridge crossing. This station is located approximately 0.94 rivermile downstream from the Lightfoot Elementary School's discharge outfall point. The following information regarding Riga Run was taken from the 2008 Integrated Assessment:

Note:

No data exist for the 2008 assessment period. Evaluation of the segment from the previous assessment will be carried forward, including overall category and assessment documentation. According to Rule 8 of the 2008 Assessment Guidance Manual (07-2010), "fully supporting waters can only be carried forward as fully supporting for two additional reporting cycles with no new data." 2008 is the first assessment the segment is carried forward.

The information from the 2006 assessment is as follows:

DEQ has an ambient monitoring station 8-RIG004.52 located at Route 650.

Historical Note:

DEQ station 8-RIG004.52 was added as a special study based on the 1998 303(d) listing of Terrys Run.

The aquatic life and wildlife uses are considered fully supporting. Since there is one fecal coliform bacteria exceedance in eight sampling events, the data are insufficient to determine support for the recreation use. The fish consumption use was not assessed.

Please see Attachment 5 for Planning Statement.

b) Receiving Stream Water Quality Criteria

Part IX of 9 VAC 25-260 (360-550) designates classes and special standards applicable to defined Virginia river basins and sections. The receiving stream, unnamed tributary to Riga Run, is located within Section 3 of the York River Basin, and classified as a Class III water.

At all times, Class III waters must achieve a dissolved oxygen (D.O.) of 4.0 mg/L or greater, a daily average D.O. of 5.0 mg/L or greater, a temperature that does not exceed 32°C, and maintain a pH of 6.0-9.0 standard units (S.U.).

Attachment 6 details other water quality criteria applicable to the receiving stream.

Ammonia:

Staff has re-evaluated the receiving stream ambient monitoring data for pH and temperature and the effluent data for pH and finds no significant differences from the data used to establish ammonia criteria and subsequent effluent limits calculated in the 2004 permit reissuance. However, the 2003 ammonia effluent limitations were not incorporated into the 2004 permit reissuance. This was because during the 1999 permit modification new information was obtained that was not previously noted that indicated the discharge was intermittent; therefore, only the acute ammonia criteria should be used for to determine the ammonia effluent limitation. At that time, based on the 1999 Water Quality Standards (acute criteria only) the ammonia effluent limitation was determined to be 7.8 mg/L. A re-evaluation in 2003 of the ammonia criteria using the 2003 Water Quality Standards determined that the ammonia effluent limitation should be 12.1 mg/L. During this permit reissuance, the ammonia effluent limitations re-evaluation concurred with the 2003 re-evaluation by determining that a 12.0 mg/L effluent limitation would maintain water quality standards in the receiving stream. However, because the effluent quality has been able to comply with the stricter ammonia effluent limitation established in the 1999 permit modification, the ammonia effluent limitation will remain at 7.8 mg/L for this permit reissuance. See Attachment 7 for the ammonia calculations.

Metals Criteria:

The Water Quality Criteria for some metals are dependent on the receiving stream's hardness (expressed as mg/l calcium carbonate). The average hardness of the receiving stream is 20 mg/L. This hardness value is based on stream data collected at the 8-RIG004.52 (Route 650) DEQ ambient water quality monitoring station between 1999 and 2000. See Attachment 8 for the hardness data. The hardness-dependent metals criteria shown in Attachment 6 are based on this value.

Bacteria Criteria:

The Virginia Water Quality Standards (9 VAC 25-260-170 B.) states sewage discharges shall be disinfected to achieve the following criteria:

- 1) *E. coli* bacteria per 100 ml of water shall not exceed the following:

	Geometric Mean ¹	Single Sample Maximum
Freshwater <i>E. coli</i> (N/100 ml)	126	235

¹For two or more samples [taken during any calendar month].

c) Receiving Stream Special Standards

The State Water Control Board's Water Quality Standards, River Basin Section Tables (9 VAC 25-260-360, 370 and 380) designates the river basins, sections, classes, and special standards for surface waters of the Commonwealth of Virginia. The receiving stream, unnamed tributary to Riga Run, is located within Section 3 of the York River Basin. There are no special standards for this stream section.

d) Threatened or Endangered Species

The Virginia DGIF Fish and Wildlife Information System Database was searched on May 13, 2009 for records to determine if there are threatened or endangered species in the vicinity of the discharge. No threatened or endangered species were identified. See Attachment 9 for the database documentation..

16. Antidegradation (9 VAC 25-260-30):

All state surface waters are provided one of three levels of antidegradation protection. For Tier 1 or existing use protection, existing uses of the water body and the water quality to protect these uses must be maintained. Tier 2 water bodies have water quality that is better than the water quality standards. Significant lowering of the water quality of Tier 2 waters is not allowed without an evaluation of the economic and social impacts. Tier 3 water bodies are exceptional waters and are so designated by regulatory amendment. The antidegradation policy prohibits new or expanded discharges into exceptional waters.

The receiving stream has been classified as Tier 1 based on the receiving stream being a dry ditch. Permit limits proposed have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

17. Effluent Screening, Wasteload Allocation, and Effluent Limitation Development:

To determine water quality-based effluent limitations for a discharge, the suitability of data must first be determined. Data is suitable for analysis if one or more representative data points is equal to or above the quantification level ("QL") and the data represent the exact pollutant being evaluated.

Next, the appropriate Water Quality Standards (WQS) are determined for the pollutants in the effluent. Then, the Wasteload Allocations (WLA) are calculated. In this case since the critical flows 7Q10 and 1Q10 have been determined to be zero, the WLA's are equal to the WQS. The WLA values are then compared with available effluent data to determine the need for effluent limitations. Effluent limitations are needed if the 97th percentile of the daily effluent concentration values is greater than the acute wasteload allocation or if the 97th percentile of the four-day average effluent concentration values is greater than the chronic wasteload allocation. Effluent limitations are based on the most limiting WLA, the required sampling frequency, and statistical characteristics of the effluent data.

a) Effluent Screening:

Effluent data obtained from the permit application and DMR has been reviewed and determined to be suitable for evaluation. Effluent data were reviewed, and there have only been two exceedances of the effluent limitations between December 2003 and March 2009. Ammonia monthly average and weekly maximum effluent limitations were violated in April 2007 (13.3 mg/L). The Total Residual Chlorine instantaneous technical maximum was violated in May 2007 (0.5 mg/L). See Attachment 10.

The following pollutants require a wasteload allocation analysis: Total Residual Chlorine, Ammonia as N

b) Mixing Zones and Wasteload Allocations (WLAs):

Wasteload allocations (WLAs) are calculated for those parameters in the effluent with the reasonable potential to cause an exceedance of water quality criteria. The basic calculation for establishing a WLA is the steady state complete mix equation:

$$WLA = \frac{C_o [Q_e + (f)(Q_s)] - [(C_s)(f)(Q_s)]}{Q_e}$$

Where:	WLA	=	Wasteload allocation
	C _o	=	In-stream water quality criteria
	Q _e	=	Design flow
	Q _s	=	Critical receiving stream flow (1Q10 for acute aquatic life criteria; 7Q10 for chronic aquatic life criteria; 30Q10 for chronic ammonia criteria; harmonic mean for carcinogen-human health criteria; and 30Q5 for non-carcinogen human health criteria)
	f	=	Decimal fraction of critical flow
	C _s	=	Mean background concentration of parameter in the receiving stream.

The water segment receiving the discharge via Outfall 001 is considered to have a 7Q10 and 1Q10 of 0.0 MGD. As such, there is no mixing zone and the WLA is equal to the C_o .

c) Effluent Limitations Toxic Pollutants, Outfall 001 –

9 VAC 25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Those parameters with WLAs that are near effluent concentrations are evaluated for limits.

The VPDES Permit Regulation at 9 VAC 25-31-230.D. requires that monthly and weekly average limitations be imposed for continuous discharges from POTWs and monthly average and daily maximum limitations be imposed for all other continuous non-POTW discharges.

1) Ammonia as N:

Staff evaluated the new ambient water quality data for the receiving stream and has concluded that is not significantly different than what was used to derive the 2003 ammonia limits (Attachment 7). However, due to the facility's demonstration that it can comply with the 1999 ammonia effluent limitations (7.8 mg/L) which are more stringent than those determined in the 2003 and 2009 ammonia effluent limitation evaluations (12 mg/L), the 1999 ammonia effluent limitations are proposed to continue in this permit reissuance.

2) Total Residual Chlorine:

Chlorine is used for disinfection and is potentially in the discharge. Staff calculated WLAs for TRC using current critical flows and the mixing allowance. In accordance with current DEQ guidance, staff used a default data point of 0.2 mg/L and the calculated WLAs to derive limits. A monthly average of 0.008 mg/L and a weekly average limit of 0.010 mg/L are proposed for this discharge (see Attachment 11).

3) Metals/Organics:

No data was available to review; therefore, no limits are needed.

d) Effluent Limitations and Monitoring, Outfall 001 – Conventional and Non-Conventional Pollutants

No changes to dissolved oxygen (D.O.), biochemical oxygen demand-5 day (BOD₅), total suspended solids (TSS), and pH limitations are proposed.

Dissolved Oxygen and BOD₅ were based on a stream model. The previous two permit reissuance fact sheets stated that the stream model could not be located. Since the existing BOD₅ and dissolved oxygen effluent limitations have not caused degradation to the receiving stream, it is staff's best professional judgment that these limitations will continue to protect the receiving stream's water quality.

It is staff's practice to equate the Total Suspended Solids limits with the BOD₅ limits. TSS limits are established to equal BOD₅ limits since the two pollutants are closely related in terms of treatment of domestic sewage.

pH limitations are set at the water quality criteria.

E. coli limitations are in accordance with the Water Quality Standards 9 VAC25-260-170.

e) Effluent Limitations and Monitoring Summary.

The effluent limitations are presented in the following table. Limits were established for Flow, BOD₅, Total

Suspended Solids, Ammonia, pH, Dissolved Oxygen, and Total Residual Chlorine.

The limit for Total Suspended Solids is based on Best Professional Judgement.

The mass loading (kg/d) for monthly and weekly averages were calculated by multiplying the concentration values (mg/l), with the flow values (in MGD) and a conversion factor of 3.785.

Sample Type and Frequency are in accordance with the recommendations in the VPDES Permit Manual.

18. Antibacksliding:

All limits in this permit are at least as stringent as those previously established. Backsliding does not apply to this reissuance.

19. Effluent Limitations/Monitoring Requirements:

Design flow is 0.004 MGD.

Effective Dates: During the period beginning with the permit's effective date and lasting until the expiration date.

Outfall No. 001 has been designated as effluent obtained after the post dechlorination unit.

PARAMETER	BASIS FOR LIMITS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
		Monthly Average		Weekly Average		Minimum	Maximum	Frequency	Sample Type
Flow (MGD)		NL		N/A		N/A	NL	1/D	Estimated
pH	2	N/A		N/A		6.0 S.U.	9.0 S.U.	1/D	Grab
BOD ₅	1	24 mg/L	0.40 kg/day	36 mg/L	0.60 kg/day	N/A	N/A	1/M	Grab
Total Suspended Solids (TSS)	1	24 mg/L	0.40 kg/day	36 mg/L	0.60 kg/day	N/A	N/A	1/M	Grab
DO	2	N/A		N/A		5.0 mg/L	N/A	1/D	Grab
Ammonia, as N (mg/L)	2	7.8 mg/L		7.8 mg/L		N/A	N/A	1/M	Grab
<i>E. coli</i> (Geometric Mean)	2	126 n/100mls		N/A		N/A	N/A	2/M	Grab
Total Residual Chlorine (after contact tank)	1,2,3	N/A		N/A		1.0 mg/L	N/A	1/D	Grab
Total Residual Chlorine (after dechlorination)	2	0.008 mg/L		0.01 mg/L		N/A	N/A	1/D	Grab

The basis for the limitations codes are:

1. Best Professional Judgment
2. Water Quality Standards
3. DEQ Disinfection Guidance

MGD = Million gallons per day.

N/A = Not applicable.

NL = No limit; monitor and report.

S.U. = Standard units.

1/D = Once every day.

1/M = Once every month.

2/M = Two per month at least 7 days apart.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

20. Other Permit Requirements :

- a) Part I.B. of the permit contains additional chlorine monitoring requirements, quantification levels and compliance reporting instructions.

A minimum chlorine residual must be maintained at the exit of the chlorine contact tank to assure adequate disinfection. No more than 10% of the monthly test results for TRC at the exit of the chlorine contact tank shall be <1.0 mg/L with any TRC <0.6 mg/L considered a system failure. Monitoring at numerous STPs has concluded that a TRC residual of 1.0 mg/L is an adequate indicator of compliance with the *E. coli* criteria. *E. coli* limits are defined in this section as well as monitoring requirements to take effect should an alternate means of disinfection be used.

9 VAC 25-31-190.L.4.c. requires an arithmetic mean for measurement averaging and 9 VAC 25-31-220.D. requires limits be imposed where a discharge has a reasonable potential to cause or contribute to an in-stream excursion of water quality criteria. Specific analytical methodologies for toxics are listed in this permit section as well as quantification levels (QLs) necessary to demonstrate compliance with applicable permit limitations or

for use in future evaluations to determine if the pollutant has reasonable potential to cause or contribute to a violation. Required averaging methodologies are also specified.

21. Other Special Conditions:

- a) 95% Capacity Reopener. The VPDES Permit Regulation at 9 VAC 25-31-200.B.2. requires all POTWs and PVOTWs develop and submit a plan of action to DEQ when the monthly average influent flow to their sewage treatment plant reaches 95% or more of the design capacity authorized in the permit for each month of any three consecutive month period. This facility is a POTW.
- b) O&M Manual Requirement. Required by Code of Virginia §62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790; VPDES Permit Regulation, 9 VAC 25-31-190.E. Within 90 days of the effective date of this permit, the permittee shall submit for approval an Operation and Maintenance (O&M) Manual or a statement confirming the accuracy and completeness of the current O&M Manual to the Department of Environmental Quality, Northern Regional Office (DEQ-NRO). Future changes to the facility must be addressed by the submittal of a revised O&M Manual within 90 days of the changes. Non-compliance with the O&M Manual shall be deemed a violation of the permit.
- c) Licensed Operator Requirement. The Code of Virginia at §54.1-2300 et seq. and the VPDES Permit Regulation at 9 VAC 25-31-200 C, and Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators. This facility requires a Class IV operator.
- d) Reliability Class. The Sewage Collection and Treatment Regulations at 9 VAC 25-790 require sewage treatment works to achieve a certain level of reliability in order to protect water quality and public health consequences in the event of component or system failure. Reliability means a measure of the ability of the treatment works to perform its designated function without failure or interruption of service. The facility is required to meet a reliability Class of II
- e) CTC, CTO Requirement. The Code of Virginia § 62.1-44.19; Sewage Collection and Treatment Regulations, 9 VAC 25-790 requires that all treatment works treating wastewater obtain a Certificate to Construct prior to commencing construction and to obtain a Certificate to Operate prior to commencing operation of the treatment works.
- f) Treatment Works Closure Plan. The State Water Control Law §62.1-44.15:1.1, makes it illegal for an owner to cease operation and fail to implement a closure plan when failure to implement the plan would result in harm to human health or the environment. This condition is used to notify the owner of the need for a closure plan where a facility is being replaced or is expected to close.
- g) Water Quality Criteria Reopener. The VPDES Permit Regulation at 9 VAC 25-31-220 D. requires establishment of effluent limitations to ensure attainment/maintenance of receiving stream water quality criteria. Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.
- h) Sludge Reopener. The VPDES Permit Regulation at 9 VAC 25-31-200.C.4. requires all permits issued to treatment works treating domestic sewage (including sludge-only facilities) include a reopener clause allowing incorporation of any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the CWA. The facility includes a sewage treatment works.
- i) Sludge Use and Disposal. The VPDES Permit Regulation at 9 VAC 25-31-100.P., 220.B.2., and 420-720, and 40 CFR Part 503 require all treatment works treating domestic sewage to submit information on their sludge use and disposal practices and to meet specified standards for sludge use and disposal. The facility includes a treatment works treating domestic sewage.

Permit Section Part II. Part II of the permit contains standard conditions that appear in all VPDES Permits. In general, these standard conditions address the responsibilities of the permittee, reporting requirements, testing procedures and records retention.

23. Changes to the Permit from the Previously Issued Permit:**a) Special Conditions:**

- 1) The “Indirect Dischargers” special condition was deleted from this permit reissuance because this wastewater treatment plant serves only the elementary school so all wastewater sources are already under the control of the Orange County School Board.
- 2) The “Outfall 001 Monitoring” special condition was deleted. There was no documentation found that determined whether or not this monitoring had been conducted during the previous permit term. At this time, the staff’s best professional opinion is that this outfall monitoring is not required. This is based on reviewing the December 2003 and March 2009 DMR data which shows that the facility’s effluent is well within the permit effluent limitations. The effluent quality is not expected to change significantly between the post dechlorination unit and the actual discharge into the receiving stream.

b) Monitoring and Effluent Limitations:

- 1) The additional bacterial effluent limitations and monitoring requirement as specified in Part I. B.2 of the 2004 permit reissuance has been deleted from the 2009 permit reissuance. This special condition was incorporated into the 2004 permit reissuance to ensure that the chlorination and dechlorination units were operating efficiently so that the *E. coli* water quality standard was being maintained. Although no documentation was found to indicate that this special condition was complied with, a review of the *E. coli* data from April 2004 through May 2005 indicates that the facility has consistently met the 126 n/cmls effluent limitation. (See Attachment 12).
- 2) Due to the downstream *E. coli* bacteria impairment (Terrys Run), an *E. coli* effluent limitation of 126 n/100 mls at a sampling frequency of twice per month (at least seven days apart) was added to the permit’s effluent page, Part I.A.1. (See Item 26 of the Fact Sheet for more information.)
- 3) The 2004 permit contained a monitoring requirement for measuring the temperature of the effluent. However, the discharge monitoring report provided to the permittee did not contain the temperature requirement. So the temperature data was never reported during the permit term. The requirement for measuring the effluent temperature has been removed from the permit.

24. Variances/Alternate Limits or Conditions:

There are no variances, alternate limits, or conditions associated with this permit reissuance.

25. Public Notice Information:

First Public Notice Date: July 23, 2009

Second Public Notice Date: July 30, 2009

Public Notice Information is required by 9 VAC 25-31-280 B. All pertinent information is on file and may be inspected, and copied by contacting the: DEQ Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, Telephone No. (703) 583-3925, joan.crowther@deq.virginia.gov. See Attachment 13 for a copy of the public notice document.

Persons may comment in writing or by email to the DEQ on the proposed permit action, and may request a public hearing, during the comment period. Comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requester's interests would be directly and adversely affected by the proposed permit action. Following the comment period, the Board will make a determination regarding

the proposed permit action. This determination will become effective, unless the DEQ grants a public hearing. Due notice of any public hearing will be given.

26. 303 (d) Listed Stream Segments and Total Maximum Daily Loads (TMDL):

TMDL Reopener: This special condition is to allow the permit to reopened if necessary to bring it in compliance with any applicable TMDL that may be developed and approved for the receiving stream.

This facility discharges directly to an unnamed tributary to Riga Run. This receiving stream segment is not currently on the 2008 303(d) list for impairments. However, Riga Run discharges into Terrys Run at Segment VAN-F07R_TRY01A00. Segment VAN-F07R_TRY01A00 is listed as impaired for not meeting the recreational use water quality standard. Sufficient excursions from the instantaneous *E. coli* bacteria criterion (8 of 19 samples - 42.1%) were recorded at DEQ's ambient water quality monitoring station (8-TRY004.98) at the Route 629 crossing to assess this stream segment as not supporting of the recreation use goal for the 2008 water quality assessment. The segment was previously listed for a fecal coliform bacteria impairment, from 1998 through 2004. The *E. coli* bacteria impairment was first listed in 2006.

The entire reach of Terrys Run is also listed as impaired for not meeting the fish consumption designated use due to PCBs in fish tissue. The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, PCB fish consumption advisory. The advisory, dated 6/15/04 and modified 12/13/04 and 08/31/07, limits consumption of bluegill sunfish, carp, channel catfish, largemouth bass, striped bass, white catfish, and white perch to no more than two meals per month. The advisory also bans the consumption of gizzard shad. The affected area includes the entirety of Lake Anna and its tributaries Contrary Creek, Gold Mine Creek, and Terrys Run.

A bacteria TMDL for the Terrys Run watershed was developed and approved by the U.S. EPA on November 4, 2005. The SWCB approved the TMDL on September 27, 2006. The sources of bacteria requiring reductions are pet, livestock and wildlife waste delivered directly to the stream or via pastureland or forest, human contributions from straight pipes, failing septic systems, and leaking sanitary sewers, and biosolid application. The bacteria TMDL for Terrys Run did not specifically address the receiving stream, unnamed tributary to Riga Run; however, the TMDL did consider all upstream point source dischargers of bacteria. The Bacteria TMDL gave a WLA of 6.98E+09 cfu/year of *E. coli* bacteria to Lightfoot Elementary School Wastewater Treatment Plant.

A TMDL for the PCBs in fish tissue impairment has not been completed yet. The TMDL is due by 2018.

Special Permit considerations: None

27. Additional Comments:

Previous Board Action(s): None.

Staff Comments: The permit reissuance was delayed due to staff workload.

Public Comment: No comments were received during the public notice.

EPA Checklist: The checklist can be found in Attachment 14.

Lightfoot Elementary School Wastewater Treatment Plant
Fact Sheet Attachments

Attachment	Description
1	Flow Frequency Memo dated August 24, 1998
2	Facility Diagram
3	USGS Topographic Map – Lahore, DEQ # 170B
4	Site Inspection Report dated April 14, 2009 by Terry Nelson, DEQ-NRO Water Inspector
5	Planning Statement for Lightfoot Elementary School, dated November 17, 2008
6	Freshwater Water Quality Criteria/ Wasteload Allocated Analysis dated May 27, 2009
7	Ammonia Calculations for 1999, 2003 and 2009
8	Hardness, Temperature and pH – Stream Data
9	DGIF Threatened and Endangered Species Database Search dated May 13, 2009
10	Effluent DMR data – December 03- March 09
11	Total Chlorine Residual Calculation dated May 22, 2009
12	<i>E.coli</i> DMR Data April 2004 through May 2005
13	Public Notice
14	EPA Checklist dated May 28, 2009

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER DIVISION
Water Quality Assessments and Planning
629 E. Main Street P.O. Box 10009 Richmond, Virginia 23240

SUBJECT: Flow Frequency Determination
Lightfoot Elementary School STP - VA#0062961

TO: James A. Olson, NRO

FROM: Paul E. Herman, P.E., WQAP

DATE: August 24, 1998

COPIES: Ron Gregory, Charles Martin, File

This memo supercedes my September 30, 1993 memo to Joa Crowther concerning the subject VPDES permit.

The Lightfoot Elementary School STP discharges to an unnamed tributary to Riga Run near Unionville, VA. Stream flow frequencies are required at this site for use by the permit writer in developing effluent limitations for the VPDES permit.

The discharge enters a dry ditch and travels about 500 feet to the unnamed tributary (UT). The UT appears as a perennial stream on the USGS Lahore Quadrangle topographic map. The flow frequencies for a dry ditch are 0.0 cfs for the 1Q10, 7Q10, 30Q5, high flow 1Q10, high flow 7Q10, and harmonic mean. The flow frequencies for the UT at a point just above its confluence with the dry ditch have been determined for your use in modeling the discharge.

The USGS and VDEQ operated a continuous record gage on the Bunch Creek near Boswells Tavern, VA (#01671500) from 1948 to 1979. The gage was located at the U.S. Route 15 bridge in Louisa County, VA. The flow frequencies for the gage and the discharge point are presented below. The values at the discharge point were determined by drainage area proportions and do not address any withdrawals, discharges, or springs lying upstream.

Bunch Creek near Boswells Tavern, VA (#01671500):

Drainage Area = 4.37 mi ²	
1Q10 = 0.0 cfs	High Flow 1Q10 = 0.47 cfs
7Q10 = 0.0 cfs	High Flow 7Q10 = 0.60 cfs
30Q5 = 0.0 cfs	HM = 0.0 cfs

UT to Riga Run above Lightfoot ditch:

Drainage Area = 0.74 mi ²	
1Q10 = 0.0 cfs	High Flow 1Q10 = 0.08 cfs
7Q10 = 0.0 cfs	High Flow 7Q10 = 0.10 cfs
30Q5 = 0.0 cfs	HM = 0.0 cfs

The high flow months are December through May. If you have any questions concerning this analysis, please let me know.

FLOW CONVERSIONS

CFS x 0.6463 = MGD

HIGH FLOW 1Q10 EQUALS $0.08 \times 0.6463 = 0.051704$ MGD

HIGH FLOW 7Q10 EQUALS $0.10 \times 0.6463 = 0.06463$ MGD

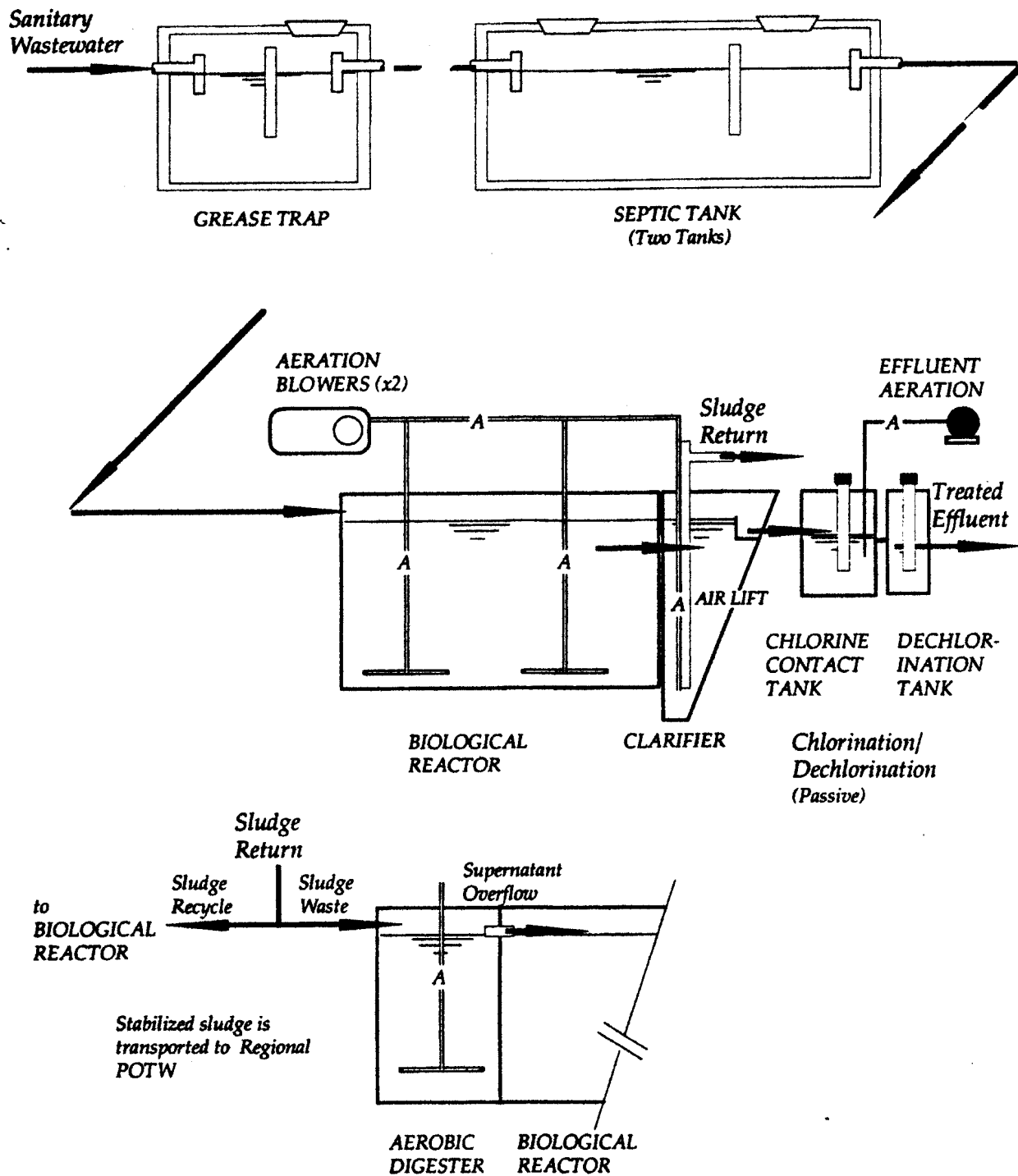


Figure 3 - 5
Wastewater Treatment Process Schematic
Lightfoot Elementary School

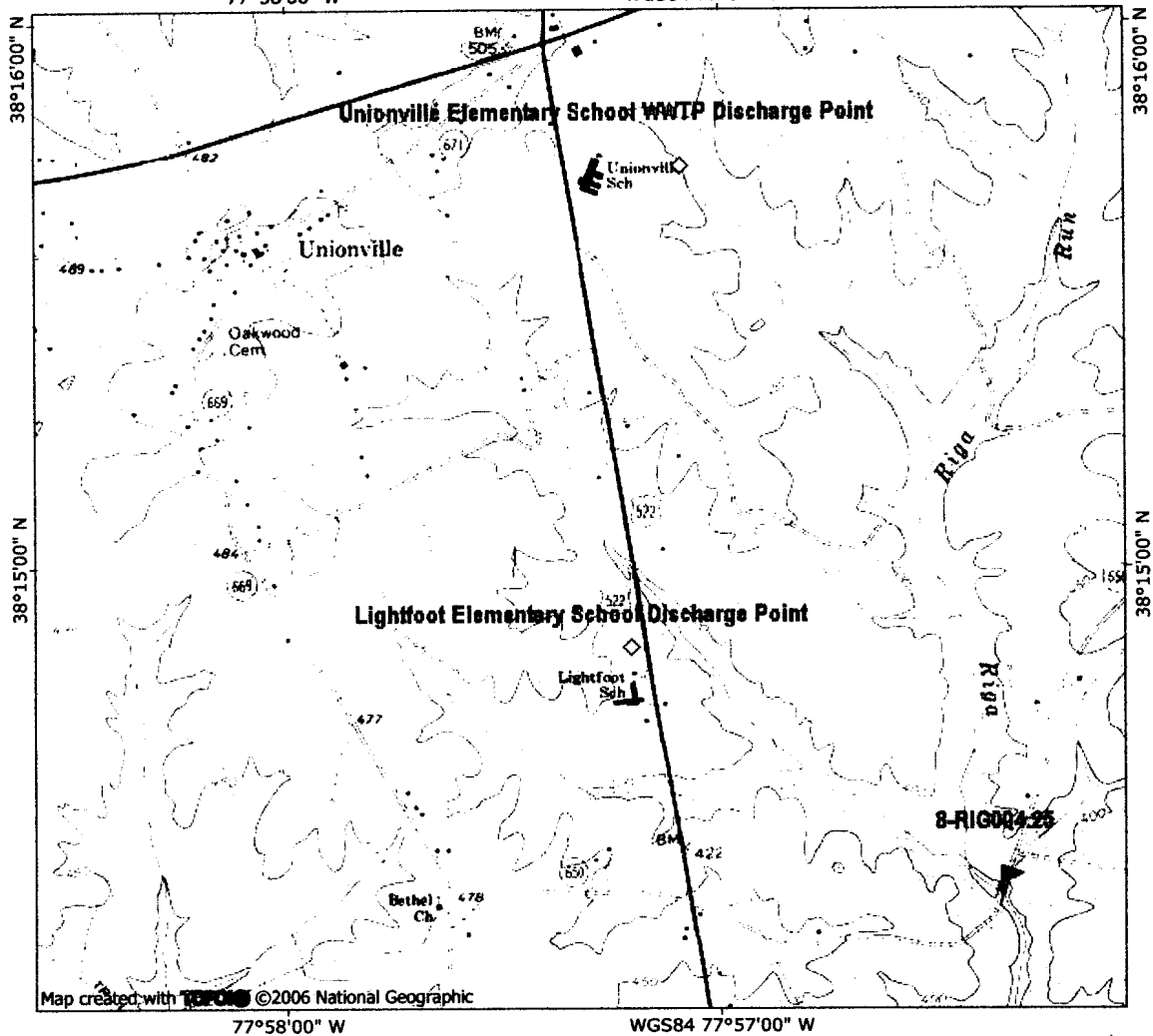
Revision 1.0

September, 2000

Lightfoot Elementary School WWTP - Unionville / Lahore USGS TOPO 05/28/09

77°58'00" W

WGS84 77°57'00" W



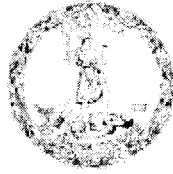
77°58'00" W

WGS84 77°57'00" W

**NATIONAL
GEOGRAPHIC**

0.0 0.5 miles
0.0 0.5 1.0 km

MN ↑ TN
10°
05/28/09



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

Preston Bryant
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

April 29, 2009

Mr. Larry Massie
Acting Superintendent
Orange County Public Schools
437 Waugh Boulevard
Orange, VA 22960

Re: Lightfoot Elementary School STP Inspection – VA0062961

Dear Mr. Massie:

Attached is a copy of the site inspection report and laboratory report generated while conducting a Facility Technical Inspection at the Lightfoot Elementary - School Sewage Treatment Plant (STP) on April 14, 2009. The compliance staff would like to thank Mr. Tim Jenkins for his time and assistance during the inspection.

If you have any questions or comments concerning this report, please feel free to contact me at the Northern Regional Office at (703) 583-3833 or by E-mail at twnelson@deq.virginia.gov.

Sincerely,

A handwritten signature in cursive script that reads "Terry Nelson".

Terry Nelson
Environmental Specialist II

cc: Permit/DMR File
OWCP - SGStell
Electronic Copy: Compliance Manager; Compliance Auditor
Electronic Copy: Mr. Tim Jenkins – Dabney & Crooks

Attachment 4

DEQ
WASTEWATER FACILITY INSPECTION REPORT
PREFACE

VPDES/State Certification No.	(RE) Issuance Date	Amendment Date	Expiration Date				
VA0062961	01/19/2004		01/18/2009				
Facility Name	Address	Telephone Number					
Lightfoot Elementary School	11360 Zachary Taylor Highway Unionville, VA 22567	(540) 661-4520					
Owner Name	Address	Telephone Number					
Orange County Public Schools	437 Waugh Boulevard Orange, VA 22960	(540) 661-4550					
Responsible Official	Title	Telephone Number					
Mr. Larry Massie	Acting Superintendent	(540) 661-4550					
Responsible Operator	Operator Cert. Class/number	Telephone Number					
Douglas Crooks	Class I / 1909000367	(540) 373-0380					
TYPE OF FACILITY:							
DOMESTIC		INDUSTRIAL					
Federal		Major					
Non-federal	X	Minor	X				
INFLUENT CHARACTERISTICS:		DESIGN:					
	Flow	4,000 gal/day					
	Population Served	Variable					
	Connections Served	One school					
	BOD ₅	No data					
	TSS	No data					
EFFLUENT LIMITS: Units in mg/L unless otherwise specified.							
Parameter	Min.	Avg.	Max.	Parameter	Min.	Avg.	Max.
Flow (MGD)		0.004	NL	BOD₅		24	36
pH (S.U.)	6.0		9.0	Total Contact Cl	1.0		
TSS		24	36	Inst Tech Min Cl	0.6		
DO	5.0			Inst Res Max Cl		0.008	0.010
NH₃		7.8	7.8				
	Receiving Stream	UT to Riga Run					
	Basin	Rappahannock River					
	Discharge Point (LAT)	38° 14 30" N					
	Discharge Point (LONG)	77° 57' 15" W					

Virginia Department of Environmental Quality
Northern Regional Office

FOCUSED CEI TECH/LAB INSPECTION REPORT

FACILITY NAME: Lightfoot Elementary School		INSPECTION DATE: April 14, 2009	
		INSPECTOR Terry Nelson	
PERMIT No.: VA0062961		REPORT DATE: April 24, 2009	
TYPE OF FACILITY:	<input checked="" type="checkbox"/> Municipal <input type="checkbox"/> Major	TIME OF INSPECTION: Arrival 0830 Departure 0920 TOTAL TIME SPENT (including prep & travel) 4 hours	
	<input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Minor		
	<input type="checkbox"/> Federal <input type="checkbox"/> Small Minor <input type="checkbox"/> HP <input type="checkbox"/> LP		
PHOTOGRAPHS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		UNANNOUNCED INSPECTION? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
REVIEWED BY / Date:			
PRESENT DURING INSPECTION: Tim Jenkins, Dabney & Crooks			

TECHNICAL INSPECTION

1. Has there been any new construction? • If so, were plans and specifications approved? <u>Comments:</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Is the Operations and Maintenance Manual approved and up-to-date? <u>Comments:</u> Outdated permit in Appendix, DEQ phone numbers are not consistent (703-583-3800 is recommended), outdated Chain of Custody for Patton, Harris, and Rust, some test methods listed are no longer approved	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Are the Permit and/or Operation and Maintenance Manual specified licensed operator being met? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. Are the Permit and/or Operation and Maintenance Manual specified operator staffing requirements being met? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Is there an established and adequate program for training personnel? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Are preventive maintenance task schedules being met? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Does the plant experience any organic or hydraulic overloading? <u>Comments:</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
8. Have there been any bypassing or overflows since the last inspection? <u>Comments:</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9. Is the standby generator (including power transfer switch) operational and exercised regularly? <u>Comments:</u> Not Applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. Is the plant alarm system operational and tested regularly? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Virginia Department of Environmental Quality
Northern Regional Office

FOCUSED CEI TECH/LAB INSPECTION REPORT

FACILITY NAME: Lightfoot Elementary School		INSPECTION DATE: April 14, 2009	
		INSPECTOR: Terry Nelson	
PERMIT No.: VA0062961		REPORT DATE: April 24, 2009	
TYPE OF FACILITY:	<input checked="" type="checkbox"/> Municipal <input type="checkbox"/> Major	TIME OF INSPECTION: Arrival 0830 Departure 0920	
	<input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Minor		
	<input type="checkbox"/> Federal <input type="checkbox"/> Small Minor		
<input type="checkbox"/> HP <input type="checkbox"/> LP		TOTAL TIME SPENT (including prep & travel) 4 hours	
PHOTOGRAPHS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		UNANNOUNCED INSPECTION? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
REVIEWED BY / Date: <i>[Signature]</i> 4/20/09			
PRESENT DURING INSPECTION: Tim Jenkins, Dabney & Crooks			

TECHNICAL INSPECTION

1. Has there been any new construction? • If so, were plans and specifications approved? <u>Comments:</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Is the Operations and Maintenance Manual approved and up-to-date? <u>Comments:</u> Outdated permit in Appendix, DEQ phone numbers are not consistent (703-583-3800 is recommended), outdated Chain of Custody for Patton, Harris, and Rust, some test methods listed are no longer approved	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Are the Permit and/or Operation and Maintenance Manual specified licensed operator being met? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. Are the Permit and/or Operation and Maintenance Manual specified operator staffing requirements being met? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Is there an established and adequate program for training personnel? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Are preventive maintenance task schedules being met? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Does the plant experience any organic or hydraulic overloading? <u>Comments:</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
8. Have there been any bypassing or overflows since the last inspection? <u>Comments:</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9. Is the standby generator (including power transfer switch) operational and exercised regularly? <u>Comments:</u> Not Applicable	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. Is the plant alarm system operational and tested regularly? <u>Comments:</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

TECHNICAL INSPECTION

11. Is sludge disposed of in accordance with the approved sludge management plan? Comments: <u>Wheeler Septic hauls sludge to Massaponax WWTF</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
12. Is septage received? • If so, is septage loading controlled, and are appropriate records maintained? Comments: _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
13. Are all plant records (operational logs, equipment maintenance, industrial waste contributors, sampling and testing) available for review and are records adequate? Comments: _____	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
14. Which of the following records does the plant maintain? <div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Operational logs <input checked="" type="checkbox"/> Instrument maintenance & calibration </div> <div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Mechanical equipment maintenance <input type="checkbox"/> Industrial Waste Contribution (Municipal facilities) </div> Comments: _____	
15. What does the operational log contain? <div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Visual observations <input checked="" type="checkbox"/> Flow Measurement <input checked="" type="checkbox"/> Laboratory results <input checked="" type="checkbox"/> Process adjustments </div> <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Control calculations <input type="checkbox"/> Other (specify) </div> Comments: _____	
16. What do the mechanical equipment records contain? <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> As built plans and specs <input checked="" type="checkbox"/> Manufacturers instructions <input checked="" type="checkbox"/> Lubrication schedules </div> <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Spare parts inventory <input type="checkbox"/> Equipment/parts suppliers </div> <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Other (specify) </div> Comments: _____	
17. What do the industrial waste contribution records contain (Municipal only)? <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Waste characteristics <input type="checkbox"/> Impact on plant <input type="checkbox"/> Locations and discharge types </div> <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Other (specify) </div> Comments: Not applicable	
18. Which of the following records are kept at the plant and available to personnel? <div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Equipment maintenance records <input checked="" type="checkbox"/> Operational log <input type="checkbox"/> Industrial contributor records </div> <div style="display: flex; justify-content: space-between;"> <input checked="" type="checkbox"/> Instrumentation records <input checked="" type="checkbox"/> Sampling and testing records </div> Comments: _____	
19. List records not normally available to plant personnel and their location: Comments: Major maintenance records stored at Orange County Schools superintendent office.	
20. Are the records maintained for the required time period (three or five years)? Comments: _____	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

UNIT PROCESS EVALUATION SUMMARY SHEET

UNIT PROCESS	APPLICABLE	PROBLEMS*	COMMENTS
Sewage Pumping			
Flow Measurement (Influent)			
Screening/Comminution			
Grit Removal			
Flow Equalization	X		
Primary Sedimentation			
Septic Tank and Sand Filter	X		
Activated Sludge Aeration	X		
Secondary Sedimentation	X		
Flocculation			
Tertiary Sedimentation			
Filtration			
Chlorination	X		
Dechlorination	X		
Post Aeration	X		
Flow Measurement (Effluent)	X		
Plant Outfall	X		
Sludge Pumping			
Aerobic Digestion			

* **Problem Codes**

- | | |
|----------------------------------|--|
| 1. Unit Needs Attention | 4. Unapproved Modification or Temporary Repair |
| 2. Abnormal Influent/Effluent | 5. Evidence of Process Upset |
| 3. Evidence of Equipment Failure | 6. Other (explain in comments) |

INSPECTION OVERVIEW AND CONDITION OF TREATMENT UNITS

- Operators are at the facility approximately 30 minutes per visit. The plant is not manned when school is not in session or no discharge is anticipated.
- Orange County schools were not in session during the inspection.
- A grease trap and septic tank precede the treatment system. Orange County Schools maintains the grease trap and septic tank. The septic tank was pumped out in July 2008.
- The secondary treatment system is a package plant that contains a sludge holding tank, aeration basins, and clarifier.
- An animal has created a burrow adjacent to the package plant outfall pipe or the ground has eroded at this location. The hole should be filled, and if caused by an animal; the animal removed.
- The log book is stored in the laboratory building. The log book included entries for minor maintenance performed on the system.
- The laboratory building has equipment, chemical pumps, and chemical tanks that are no longer used.
- Mr. Jenkins cycled all the blowers during the inspection. No problems were noted for the blowers.
- The aeration basin color was an unusual shade of brown that stabilized as the recycle pumps ran. Without school in session, negligible influent flow had been received since last Friday according to Mr. Jenkins.
- From the clarifier, the effluent pipe goes down hill, turns right, and enters the disinfection and post aeration systems.
- Where the pipe turns, there is a manhole with an open grate top. Leaves and debris have fallen through the grate. A high water flow, including overland sheetflow, could flush this debris into the disinfection system.
- Tablet feeders are used for chlorine and sodium bisulfite.
- Post aeration is provided using a blower.
- Appreciable foam was collecting in the post aeration chamber.
- No foam appeared to be exiting the plant.
- Mr. Jenkins said the foam was a combination of no discharge and the extended treatment time when no flow enters the treatment system.
- From the plant, the effluent flows to a drainage ditch along Route 522.



1) Hole observed by package plant outlet pipe.

Permit #	VA0062961
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LABORATORY INSPECTION

PRESENT DURING INSPECTION:	Tim Jenkins, Dabney & Crooks
-----------------------------------	------------------------------

- | | |
|---|---|
| <p>1. Do lab records include sampling date/time, analysis date/time, sample location, test method, test results, analyst's initials, instrument calibration and maintenance, and Certificate of Analysis?</p> <p> <input checked="" type="checkbox"/> Sampling Date/Time <input checked="" type="checkbox"/> Analysis Date/Time <input type="checkbox"/> Sample Location <input checked="" type="checkbox"/> Test Method <input checked="" type="checkbox"/> Test Results
 <input checked="" type="checkbox"/> Analyst's Initials <input type="checkbox"/> Instrument Calibration & Maintenance
 <input type="checkbox"/> Chain of Custody <input checked="" type="checkbox"/> Certificate of Analysis </p> | |
| <p>2. Are Discharge Monitoring Reports complete and correct?
 Month(s) reviewed:
 <div style="border: 1px solid black; padding: 2px; display: inline-block;">December 2008 to February 2009</div> </p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>3. Are sample location(s) according to permit requirements (after all treatment unless otherwise specified)?</p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>4. Are sample collection, preservation, and holding times appropriate; and is sampling equipment adequate?</p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>5. Are grab and composite samples representative of the flow and the nature of the monitored activity?</p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>6. If analysis is performed at another location, are shipping procedures adequate?
 List parameters and name & address of contract lab(s):
 Dabney & Crooks, Fredericksburg, VA: BOD and TSS
 Patton, Harris, and Rust, Fredericksburg, VA: Nitrogen </p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>7. Is Laboratory equipment in proper operating range?</p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>8. Are annual thermometer calibration(s) adequate?</p> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>9. Is the laboratory grade water supply adequate? Not applicable</p> | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>10. Are analytical balance(s) adequate? Not applicable</p> | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <p>11. Parameters evaluated during this inspection (attach checklists):</p> <div style="margin-left: 40px;"> <input type="checkbox"/> pH
 <input type="checkbox"/> Temperature
 <input type="checkbox"/> Total Residual Chlorine
 <input type="checkbox"/> Dissolved Oxygen
 <input type="checkbox"/> Biochemical Oxygen Demand
 <input type="checkbox"/> Total Suspended Solids
 <input type="checkbox"/> Ammonia
 <input type="checkbox"/> TKN
 <input type="checkbox"/> Nitrate + Nitrite
 <input type="checkbox"/> Orthophosphate
 <input type="checkbox"/> Bacteriological <div style="display: inline-block; width: 150px;"></div> <input type="checkbox"/> Fecal Coliform <input type="checkbox"/> E. Coli <input type="checkbox"/> Enterococci </div> | |

Comments:

- The pH buffers, DPD pillows, and Hach Spec Check Standards are kept at the Lightfoot Elementary School.
- Meter calibration is normally done at Lightfoot Elementary School, but operators can take the supplies to another school if the first plant visit is not Lightfoot Elementary.
- Operator logs show proper calibration procedures are followed. Since the facility was not discharging, the operator did not perform meter calibration.
- DEQ staff did check the meter condition and lab supplies.
- The membrane and the probe for the DO meter were in good condition. The DO meter thermistor had been verified against a NIST thermometer on 09/08/08 and read 0.1 degree C low.
- The lot number for the DPD pillows was A8212 with an expiration date of July 2013.
- The Hach Spec Checks were lot A7332 and expire November 2009.
- The vials for the Hach Pocket Colorimeter II did not appear scratched, but did need cleaned.
- The pH 4 buffer expires in July 2010, the pH 7 buffer expires in December 2010, and the pH 10 buffer expires in July 2010. All three buffers were clear with no debris in the bottles.
- Mr. Jenkins had just obtained the pH meter and had not had the thermistor verified against a NIST thermometer. The verification was completed 04/15/09.

Permit #	VA0062961
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EFFLUENT FIELD DATA:

Flow	NA	MGD	Dissolved Oxygen	NA	mg/L	TRC (Contact Tank)	NA	mg/L
pH	NA	S.U.	Temperature	NA	°C	TRC (Final Effluent)	NA	mg/L
Was a Sampling Inspection conducted? <input type="checkbox"/> Yes (see Sampling Inspection Report) <input checked="" type="checkbox"/> No								

CONDITION OF OUTFALL AND EFFLUENT CHARACTERISTICS:

1. Type of outfall:	<input type="checkbox"/> Shore based	<input type="checkbox"/> Submerged	Diffuser?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Are the outfall and supporting structures in good condition?	<input type="checkbox"/> Yes		<input type="checkbox"/> No		
3. Final Effluent (evidence of following problems):	<input type="checkbox"/> Sludge bar	<input type="checkbox"/> Grease			
	<input type="checkbox"/> Turbid effluent	<input type="checkbox"/> Visible foam	<input type="checkbox"/> Unusual color	<input type="checkbox"/> Oil sheen	
4. Is there a visible effluent plume in the receiving stream?	<input type="checkbox"/> Yes		<input type="checkbox"/> No		
5. Receiving stream:	<input type="checkbox"/> No observed problems		<input type="checkbox"/> Indication of problems (explain below)		
Comments: No discharge during inspection.					

REQUIRED CORRECTIVE ACTIONS:

None

NOTES and COMMENTS:

1. Debris and leaves should be removed from the manhole with an open grate. 2. Orange County Schools should consider using a solid manhole cover instead of an open grate cover for this manhole. 3. The hole/burrow near the package plant exit pipe should be filled and steps taken to prevent another hole from appearing.
--

To: Joan C. Crowther
From: Katie Conaway

Date: November 17, 2008
Subject: Planning Statement for Lightfoot Elementary School
Permit Number: VA0062861

Discharge Type: Municipal
Discharge Flow: 0.004 MGD

Receiving Stream: Riga Run, UT
Latitude / Longitude: 38° 14' 51" / 77° 57' 12"
Waterbody ID: F07, YO17

1. Is there monitoring data for the receiving stream?
 - If yes, please attach latest summary.
 - If no, where is the nearest downstream monitoring station.

There is no monitoring data for the receiving stream (Unnamed Tributary to Riga Run). The nearest downstream monitoring station is DEQ ambient water quality monitoring station 8-RIG004.52, located on Riga Run at the Route 650 bridge crossing. This station is located approximately 0.94 rivermiles downstream from the Outfall of VA0062861. The following information regarding Riga Run was taken from the 2008 Integrated Assessment:

Class III, Section 3.

Note: No data exist for the 2008 assessment period. Evaluation of the segment from the previous assessment will be carried forward, including overall category and assessment documentation. According to Rule 8 of the 2008 Assessment Guidance Manual (07-2010), "fully supporting waters can only be carried forward as fully supporting for two additional reporting cycles with no new data." 2008 is the first assessment the segment is carried forward.

*The information from the 2006 assessment is as follows:
DEQ ambient monitoring station 8-RIG004.52, at Route 650.*

Historical Note: DEQ station 8-RIG004.52 was added as a special study based on the 1998 303(d) listing of Terrys Run.

The aquatic life and wildlife uses are considered fully supporting. Since there is one fecal coliform bacteria exceedance in eight sampling events, the data are insufficient to determine support for the recreation use. The fish consumption use was not assessed.

2. Is the receiving stream on the current 303(d) list?

No.

- If yes, what is the impairment?

N/A

- Has the TMDL been prepared?

N/A

- If yes, what is the WLA for the discharge?

N/A

- If no, what is the schedule for the TMDL?

N/A

3. If the answer to (2) above is no, is there a downstream 303(d) listed impairment?

Yes.

- If yes, what is the impairment?

Riga flows into Terrys Run at Segment VAN-F07R_TRY01A00. Segment VAN-F07R_TRY01A00 is listed as impaired for not meeting the recreational use water quality standard. Sufficient excursions from the instantaneous *E. coli* bacteria criterion (8 of 19 samples - 42.1%) were recorded at DEQ's ambient water quality monitoring station (8-TRY004.98) at the Route 629 crossing to assess this stream segment as not supporting of the recreation use goal for the 2008 water quality assessment. The segment was previously listed for a fecal coliform bacteria impairment, from 1998 through 2004. The *E. coli* bacteria impairment was first listed in 2006.

The entire reach of Terrys Run is also listed as impaired for not meeting the fish consumption designated use due to PCBs in fish tissue. The fish consumption use is categorized as impaired due to a Virginia Department of Health, Division of Health Hazards Control, PCB fish consumption advisory. The advisory, dated 6/15/04 and modified 12/13/04 and 08/31/07, limits consumption of bluegill sunfish, carp, channel catfish, largemouth bass, striped bass, white catfish, and white perch to no more than two meals per month. The advisory also bans the consumption of gizzard shad. The affected area includes the entirety of Lake Anna and its tributaries Contrary Creek, Gold Mine Creek, and Terrys Run.

- Has a TMDL been prepared?

A bacteria TMDL for the Terrys Run watershed was developed and approved by the U.S. EPA on November 4, 2005. The SWCB approved the TMDL on September 27, 2006. The sources of bacteria requiring reductions are pet, livestock and wildlife waste delivered directly to the stream or via pastureland or forest, human contributions from straight pipes, failing septic systems, and leaking sanitary sewers, and biosolid application.

A TMDL for the PCBs in fish tissue impairment has not been completed yet. The TMDL is due by 2018.

- Will the TMDL include the receiving stream?

The bacteria TMDL for Terrys Run did not specifically address the receiving stream (Unnamed Tributary to Riga Run); however, the TMDL did consider all upstream point source dischargers of bacteria.

- Is there a WLA for the discharge?

Yes. The Bacteria TMDL gave a WLA of **6.98E+09** cfu/year of *E. coli* bacteria to VA0062961.

- What is the schedule for the TMDL?

Bacteria TMDL was approved by EPA on 11/04/2005.
PCB Fish Tissue TMDL – due by 2108

4. Is there monitoring or other conditions that Planning/Assessment needs in the permit?

Not at this time.

FRESHWATER WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: **Lightfoot Elementary School**
Receiving Stream: **Biga Run, UT**

Permit No.: **VA0062861**

Version: **OWP Guidance Memo 00-2011 (8/24/00)**

Stream Information

Mean Hardness (as CaCO₃) = **20 mg/L**
90% Temperature (Annual) = **23 deg C**
90% Temperature (Wet season) = **deg C**
90% Maximum pH = **7.1 SU**
10% Maximum pH = **SU**
The Designation (1 or 2) = **1**
Public Water Supply (PWS) Y/N? = **n**
Trout Present Y/N? = **n**
Early Life Stages Present Y/N? = **y**

Stream Flows

1010 (Annual) = **0 MGD**
7010 (Annual) = **0 MGD**
30Q10 (Annual) = **0 MGD**
1010 (Wet season) = **0 MGD**
30Q10 (Wet season) = **0 MGD**
30Q5 = **0 MGD**
Harmonic Mean = **0 MGD**
Annual Average = **0 MGD**

Mixing Information

Annual - 1010 Mix = **100 %**
- 7010 Mix = **100 %**
- 30Q10 Mix = **100 %**
Wet Season - 1010 Mix = **100 %**
- 30Q10 Mix = **100 %**

Effluent Information

Mean Hardness (as CaCO₃) = **68.2 mg/L**
90% Temp (Annual) = **21 deg C**
90% Temp (Wet season) = **deg C**
90% Maximum pH = **7.3 SU**
10% Maximum pH = **SU**
Discharge Flow = **0.004 MGD**

Parameter (ug/L unless noted)	Background Conc.	Water Quality Criteria			Waste Load Allocations			Antidegradation Baseline			Antidegradation Allocations			Most Limiting Allocations		
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)
Acenaphthene	0	-	-	na	2.7E+03	-	-	na	2.7E+03	-	-	-	-	-	-	na
Acetol	0	-	-	na	7.8E+02	-	-	na	7.8E+02	-	-	-	-	-	-	na
Acrylonitrile	0	-	-	na	6.8E+00	-	-	na	6.8E+00	-	-	-	-	-	-	na
Adin	0	3.0E+00	-	na	1.4E+03	3.0E+00	-	na	1.4E+03	-	-	-	-	-	-	na
Amonia-N (mg/L) (Total)	0	1.2E+01	2.10E+00	na	-	1.2E+01	2.1E+00	na	-	-	-	-	-	1.2E+01	2.1E+00	na
Amonia-N (mg/L) (High Flow)	0	1.2E+01	3.18E+00	na	-	1.2E+01	3.2E+00	na	-	-	-	-	-	1.2E+01	3.2E+00	na
Anthracene	0	-	-	na	1.1E+05	-	-	na	1.1E+05	-	-	-	-	-	-	na
Antimony	0	-	-	na	4.3E+03	-	-	na	4.3E+03	-	-	-	-	-	-	na
Arsenic	0	3.4E+02	1.5E+02	na	-	3.4E+02	1.5E+02	na	-	-	-	-	-	3.4E+02	1.5E+02	na
Barium	0	-	-	na	-	-	-	na	-	-	-	-	-	-	-	na
Benzene	0	-	-	na	7.1E+02	-	-	na	7.1E+02	-	-	-	-	-	-	na
Benzidine	0	-	-	na	5.4E+03	-	-	na	5.4E+03	-	-	-	-	-	-	na
Benzo (a) anthracene	0	-	-	na	4.9E+01	-	-	na	4.9E+01	-	-	-	-	-	-	na
Benzo (b) fluoranthene	0	-	-	na	4.9E+01	-	-	na	4.9E+01	-	-	-	-	-	-	na
Benzo (k) fluoranthene	0	-	-	na	4.9E+01	-	-	na	4.9E+01	-	-	-	-	-	-	na
Benzo (a) pyrene	0	-	-	na	4.9E+01	-	-	na	4.9E+01	-	-	-	-	-	-	na
Bis(2-Chloroethyl) Ether	0	-	-	na	1.4E+01	-	-	na	1.4E+01	-	-	-	-	-	-	na
Bis(2-Chloropropyl) Ether	0	-	-	na	1.7E+05	-	-	na	1.7E+05	-	-	-	-	-	-	na
Bromodim	0	-	-	na	3.6E+03	-	-	na	3.6E+03	-	-	-	-	-	-	na
Butybenzophthalate	0	-	-	na	5.2E+03	-	-	na	5.2E+03	-	-	-	-	-	-	na
Calcium	0	2.5E+00	8.4E+01	na	-	2.5E+00	8.4E+01	na	-	-	-	-	-	2.5E+00	8.4E+01	na
Carbon Tetrachloride	0	-	-	na	4.4E+01	-	-	na	4.4E+01	-	-	-	-	-	-	na
Chloride	0	2.4E+00	4.3E+03	na	2.2E+02	2.4E+00	4.3E+03	na	2.2E+02	-	-	-	-	2.4E+00	4.3E+03	na
Chloride	0	8.6E+05	2.3E+05	na	-	8.6E+05	2.3E+05	na	-	-	-	-	-	8.6E+05	2.3E+05	na
TRC	0	1.9E+01	1.1E+01	na	-	1.9E+01	1.1E+01	na	-	-	-	-	-	1.9E+01	1.1E+01	na
Chlorobenzene	0	-	-	na	2.1E+04	-	-	na	2.1E+04	-	-	-	-	-	-	na

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria			Wetland Allocations			Antidegradation Baseline			Antidegradation Allocations			Meat Limiting Allocations		
		Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)	Acute	Chronic	HH (PWS)
Ethylbenzene	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Fluorene	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Fluorene	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Foaming Agents	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Guthion	0	-	1.0E-02	na	-	1.0E-02	na	-	-	-	-	-	-	-	-	na
Heptachlor ^c	0	5.2E-01	3.8E-03	na	5.2E-01	3.8E-03	na	5.2E-01	3.8E-03	na	5.2E-01	3.8E-03	na	5.2E-01	3.8E-03	na
Heptachlor Epoxide ^c	0	5.2E-01	3.8E-03	na	5.2E-01	3.8E-03	na	5.2E-01	3.8E-03	na	5.2E-01	3.8E-03	na	5.2E-01	3.8E-03	na
Hexachlorobenzene ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Hexachlorobutadiene ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Hexachlorocyclohexane	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Alpha-BHC ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Hexachlorocyclohexane	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Beta-BHC ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Gamma-BHC ^c (Lindane)	0	9.5E-01	na	na	9.5E-01	-	na	9.5E-01	-	na	9.5E-01	-	na	9.5E-01	-	na
Hexachlorocyclopentadiene	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Hexachloroethane ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Hydrogen Sulfide	0	-	2.0E+00	na	-	2.0E+00	na	-	-	-	-	-	-	-	-	na
Indeno (1,2,3-cd) pyrene ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Iron	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Isophorone ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Kepone	0	-	0.0E+00	na	-	0.0E+00	na	-	-	-	-	-	-	-	-	na
Lead	0	7.3E+01	8.3E+00	na	7.3E+01	8.3E+00	na	7.3E+01	8.3E+00	na	7.3E+01	8.3E+00	na	7.3E+01	8.3E+00	na
Malachion	0	-	1.0E-01	na	-	1.0E-01	na	-	-	-	-	-	-	-	-	na
Manganese	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Mercury	0	1.4E+00	7.7E-01	na	1.4E+00	7.7E-01	na	1.4E+00	7.7E-01	na	1.4E+00	7.7E-01	na	1.4E+00	7.7E-01	na
Methy Bromide	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Methoxychlor	0	-	3.0E-02	na	-	3.0E-02	na	-	-	-	-	-	-	-	-	na
Miltox	0	-	0.0E+00	na	-	0.0E+00	na	-	-	-	-	-	-	-	-	na
Monochlorobenzene	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Nickel	0	1.3E+02	1.5E+01	na	1.3E+02	1.5E+01	na	1.3E+02	1.5E+01	na	1.3E+02	1.5E+01	na	1.3E+02	1.5E+01	na
Nitrate (as N)	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Nitrobenzene	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
N-Alkylateddimethylamine ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
N-Alkylatedphenylamine ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
N-Alkylateddi-n-propylamine ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na
Parathion	0	6.5E-02	1.3E-02	na	6.5E-02	1.3E-02	na	6.5E-02	1.3E-02	na	6.5E-02	1.3E-02	na	6.5E-02	1.3E-02	na
PCB-1018	0	-	1.4E-02	na	-	1.4E-02	na	-	-	-	-	-	-	-	-	na
PCB-1221	0	-	1.4E-02	na	-	1.4E-02	na	-	-	-	-	-	-	-	-	na
PCB-1232	0	-	1.4E-02	na	-	1.4E-02	na	-	-	-	-	-	-	-	-	na
PCB-1242	0	-	1.4E-02	na	-	1.4E-02	na	-	-	-	-	-	-	-	-	na
PCB-1246	0	-	1.4E-02	na	-	1.4E-02	na	-	-	-	-	-	-	-	-	na
PCB-1254	0	-	1.4E-02	na	-	1.4E-02	na	-	-	-	-	-	-	-	-	na
PCB-1280	0	-	1.4E-02	na	-	1.4E-02	na	-	-	-	-	-	-	-	-	na
PCB Total ^c	0	-	-	na	-	-	na	-	-	-	-	-	-	-	-	na

Parameter (ug/l unless noted)	Background Conc.	Water Quality Criteria				Wastewater Allocations				Antidegradation Baseline				Antidegradation Allocations				Meat Linking Allocations			
		Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Pentachlorophenol ^c	0	7.7E-03	5.9E-03	na	8.2E+01	7.7E-03	5.9E-03	na	8.2E+01	-	-	-	-	-	-	-	-	7.7E-03	5.9E-03	na	8.2E+01
Phenol	0	-	-	na	4.6E+06	-	-	na	4.6E+06	-	-	-	-	-	-	-	-	-	-	na	4.6E+06
Pyrene	0	-	-	na	1.1E+04	-	-	na	1.1E+04	-	-	-	-	-	-	-	-	-	-	na	1.1E+04
Radionuclides (PCI except Beta/Photon)	0	-	-	na	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	na	-
Gross Alpha Activity Beta and Photon Activity (mrem/y)	0	-	-	na	1.8E+01	-	-	na	1.5E+01	-	-	-	-	-	-	-	-	-	-	na	1.5E+01
Strontium-90	0	-	-	na	4.0E+00	-	-	na	4.0E+00	-	-	-	-	-	-	-	-	-	-	na	4.0E+00
Tritium	0	-	-	na	8.0E+00	-	-	na	8.0E+00	-	-	-	-	-	-	-	-	-	-	na	8.0E+00
Selenium	0	2.0E+01	5.0E+00	na	1.1E+04	2.0E+01	5.0E+00	na	1.1E+04	-	-	-	-	-	-	-	-	2.0E+01	5.0E+00	na	1.1E+04
Silver	0	1.8E+00	-	na	-	1.8E+00	-	na	-	-	-	-	-	-	-	-	-	1.8E+00	-	na	-
Sulfide	0	-	-	na	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	na	-
1,1,2,2-Tetrachloroethane ^c	0	-	-	na	1.1E+02	-	-	na	1.1E+02	-	-	-	-	-	-	-	-	-	-	na	1.1E+02
Tetrachloroethylene ^c	0	-	-	na	8.9E+01	-	-	na	8.9E+01	-	-	-	-	-	-	-	-	-	-	na	8.9E+01
Thallium	0	-	-	na	6.3E+00	-	-	na	6.3E+00	-	-	-	-	-	-	-	-	-	-	na	6.3E+00
Toluene	0	-	-	na	2.0E+05	-	-	na	2.0E+05	-	-	-	-	-	-	-	-	-	-	na	2.0E+05
Total dissolved solids	0	-	-	na	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	na	-
Toraphene ^c	0	7.3E-01	2.0E-04	na	7.5E-03	7.3E-01	2.0E-04	na	7.5E-03	-	-	-	-	-	-	-	-	7.3E-01	2.0E-04	na	7.5E-03
Tributyltin	0	4.6E-01	6.3E-02	na	-	4.6E-01	6.3E-02	na	-	-	-	-	-	-	-	-	-	4.6E-01	6.3E-02	na	-
1,2,4-Trichlorobenzene	0	-	-	na	9.4E+02	-	-	na	9.4E+02	-	-	-	-	-	-	-	-	-	-	na	9.4E+02
1,1,2-Trichloroethane ^c	0	-	-	na	4.2E+02	-	-	na	4.2E+02	-	-	-	-	-	-	-	-	-	-	na	4.2E+02
Trichloroethylene ^c	0	-	-	na	8.1E+02	-	-	na	8.1E+02	-	-	-	-	-	-	-	-	-	-	na	8.1E+02
2,4,6-Trichlorophenol ^c	0	-	-	na	6.5E+01	-	-	na	6.5E+01	-	-	-	-	-	-	-	-	-	-	na	6.5E+01
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	-	-	na	-	-	-	na	-	-	-	-	-	-	-	-	-	-	-	na	-
Vinyl Chloride ^c	0	-	-	na	6.1E+01	-	-	na	6.1E+01	-	-	-	-	-	-	-	-	-	-	na	6.1E+01
Zinc	0	8.5E+01	8.5E+01	na	6.9E+04	8.5E+01	8.5E+01	na	6.9E+04	-	-	-	-	-	-	-	-	8.5E+01	8.5E+01	na	6.9E+04

Notes:

- All concentrations expressed as microgram/liter (ug/l), unless noted otherwise
- Discharge flow is highest monthly average or Form 2C maximum for industries and design flow for Municipalities
- Metals measured as Dissolved, unless specified otherwise
- "C" indicates a carcinogenic parameter
- Regular WLA's are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information. Antidegradation WLA's are based upon a complete mix.
- Antidegradation Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
= (0.1(WQC - background conc.) + background conc.) for human health
- WLA's established at the following stream flows: 1Q10 for Acute, 3Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 3Q10 for Non-carcinogens, Harmonic Mean for Carcinogens, and Annual Average for Disch. Mixing ratios may be substituted for stream flows where appropriate.

Metal	Target Value (SSTV)
Antimony	4.3E+03
Arsenic	9.0E+01
Barium	na
Cadmium	5.0E-01
Chromium III	3.3E+01
Chromium VI	8.4E+00
Copper	3.7E+00
Iron	na
Lead	5.0E+00
Manganese	na
Mercury	5.1E-02
Nickel	8.0E+00
Selenium	3.0E+00
Silver	7.1E-01
Zinc	3.4E+01

Note: do not use CL's lower than the minimum CL's provided in agency guidance

0.004 MGD DISCHARGE FLOW - STREAM MIX PER "Mix.exe"

Discharge Flow Used for WQS-WLA Calculations (MG)				0.004
Stream Flows		Total Mix Flows		
Allocated to Mix (MGD)		Stream + Discharge (MGD)		
Dry Season	Wet Season	Dry Season	Wet Season	
1Q10	0.000	0.004	0.004	
7Q10	0.000	N/A	N/A	
30Q10	0.000	0.004	0.004	
30Q5	0.000	N/A	N/A	
Harm. Mean	0.000	0.004	N/A	
Annual Avg.	0.000	0.004	N/A	
Stream/Discharge Mix Values				
Dry Season		Wet Season		
1Q10 90th% Temp. Mix (deg C)	21.000	0.000		
30Q10 90th% Temp. Mix (deg C)	21.000	0.000		
1Q10 90th% pH Mix (SU)	7.800	7.800		
30Q10 90th% pH Mix (SU)	7.800	7.800		
1Q10 10th% pH Mix (SU)	0.000	N/A		
7Q10 10th% pH Mix (SU)	0.000	N/A		
Calculated		Formula Inputs		
1Q10 Hardness (mg/L as CaCO3)	68.2	68.2		
7Q10 Hardness (mg/L as CaCO3)	68.2	68.2		

Ammonia - Dry Season - Acute			Ammonia - Dry Season - Chronic	
90th Percentile pH (SU)	7.800		90th Percentile Temp. (deg C)	21.000
(7.204 - pH)	-0.596		90th Percentile pH (SU)	7.800
(pH - 7.204)	0.596		MIN	1.877
Trout Present Criterion (mg N/L)	8.107		MAX	21.000
Trout Absent Criterion (mg N/L)	12.139		(7.688 - pH)	-0.112
Trout Present?	n		(pH - 7.688)	0.112
Effective Criterion (mg N/L)	12.139		Early LS Present Criterion (mg N/L)	2.095
			Early LS Absent Criterion (mg N/L)	2.095
			Early Life Stages Present?	y
			Effective Criterion (mg N/L)	2.095

Ammonia - Wet Season - Acute			Ammonia - Wet Season - Chronic	
90th Percentile pH (SU)	7.800		90th Percentile Temp. (deg C)	0.000
(7.204 - pH)	-0.596		90th Percentile pH (SU)	7.800
(pH - 7.204)	0.596		MIN	2.850
Trout Present Criterion (mg N/L)	8.107		MAX	7.000
Trout Absent Criterion (mg N/L)	12.139		(7.688 - pH)	-0.112
Trout Present?	n		(pH - 7.688)	0.112
Effective Criterion (mg N/L)	12.139		Early LS Present Criterion (mg N/L)	3.182
			Early LS Absent Criterion (mg N/L)	5.167
			Early Life Stages Present?	y
			Effective Criterion (mg N/L)	3.182

0.004 MGD DISCHARGE FLOW - COMPLETE STREAM MIX

Discharge Flow Used for WQS-WLA Calculations (MG)				0.004
100% Stream Flows Allocated to Mix (MGD)		Total Mix Flows Stream + Discharge (MGD)		
Dry Season	Wet Season	Dry Season	Wet Season	
1Q10	0.000	0.004	0.004	
7Q10	0.000	N/A	N/A	
30Q10	0.000	0.004	0.004	
30C5	0.000	N/A	N/A	
Harm. Mean	0.000	N/A	N/A	
Annual Avg.	0.000	0.004	N/A	
Stream/Discharge Mix Values				
Dry Season		Wet Season		
1Q10 90th% Temp. Mix (deg C)	21.000	0.000		
30Q10 90th% Temp. Mix (deg C)	21.000	0.000		
1Q10 90th% pH Mix (SU)	7.800	7.800		
30Q10 90th% pH Mix (SU)	7.800	7.800		
1Q10 10th% pH Mix (SU)	0.000	N/A		
7Q10 10th% pH Mix (SU)	0.000	N/A		
1Q10 Hardness (mg/L as CaCO3) =		Calculated Formula Inputs		
7Q10 Hardness (mg/L as CaCO3) =		68.200 68.200 68.200		

Ammonia - Dry Season - Acute		Ammonia - Dry Season - Chronic	
90th Percentile pH (SU)	7.800	90th Percentile Temp. (deg C)	21.000
(7.204 - pH)	-0.596	90th Percentile pH (SU)	7.800
(pH - 7.204)	0.596	MIN	1.877
Trout Present Criterion (mg N/L)	8.107	MAX	21.000
Trout Absent Criterion (mg N/L)	12.139	(7.688 - pH)	-0.112
Trout Present?	n	(pH - 7.688)	0.112
Effective Criterion (mg N/L)	12.139	Early LS Present Criterion (mg N/L)	2.095
		Early LS Absent Criterion (mg N/L)	2.095
		Early Life Stages Present?	y
		Effective Criterion (mg N/L)	2.095

Ammonia - Wet Season - Acute		Ammonia - Wet Season - Chronic	
90th Percentile pH (SU)	7.800	90th Percentile Temp. (deg C)	0.000
(7.204 - pH)	-0.596	90th Percentile pH (SU)	7.800
(pH - 7.204)	0.596	MIN	2.850
Trout Present Criterion (mg N/L)	8.107	MAX	7.000
Trout Absent Criterion (mg N/L)	12.139	(7.688 - pH)	-0.112
Trout Present?	n	(pH - 7.688)	0.112
Effective Criterion (mg N/L)	12.139	Early LS Present Criterion (mg N/L)	3.182
		Early LS Absent Criterion (mg N/L)	5.167
		Early Life Stages Present?	y
		Effective Criterion (mg N/L)	3.182

5/27/2009 2:25:49 PM

Facility = Lightfoot Elementary School
Chemical = Ammonia
Chronic averaging period = 30
WLAa = 12
WLAc =
Q.L. = .2
samples/mo. = 1
samples/wk. = 1

Summary of Statistics:

observations = 1
Expected Value = 9
Variance = 29.16
C.V. = 0.6
97th percentile daily values = 21.9007
97th percentile 4 day average = 14.9741
97th percentile 30 day average = 10.8544
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Acute Toxicity
Maximum Daily Limit = 12
Average Weekly limit = 12
Average Monthly Limit = 12

The data are:

Criteria and WLA Calculations for Ammonia based upon freshwater criteria (Nontidal Only)

Date : 12/03/03

Facility : Lightfoot Elementary School STP

Permit Number : VA0062961

Comments :

2003 Recalculated Ammonia Criteria

pH	=	7.80	S.U.
Temperature	=	21.00	C
Trout Present (Y or N)	=	N	
Early Life Stages Present (Y or N)	=	Y	
1Q10	=	0.000	MGD
7Q10	=	0.000	MGD
30Q10	=	0.00	MGD
Harmonic Mean	=	0.00	MGD
Design Flow	=	0.01	MGD
Percentage of 1Q10 by MIX.exe	=	100.00%	NA
Percentage of 7Q10 by MIX.exe	=	100.00%	NA
Water Body Tier	=	1	(1=No Antideg; 2= Antideg)

Acute - Trout Present

Calculated Ammonia Criteria = $(0.275 / 1 + 10^{(7.204-pH)}) + (39 / 1 + 10^{(6H+7.204)})$
 Calculated Ammonia Criteria = 8.11

Acute - Trout Absent

Calculated Ammonia Criteria = $(0.411 / 1 + 10^{(7.204-pH)}) + (58.4 / 1 + 10^{(6H+7.204)})$
 Calculated Ammonia Criteria = 12.14

Total Acute Ammonia Criteria = 12.14 mg/l as N

Chronic - Early Life Stages Present

Calculated Ammonia Criteria = $((0.0577 / 1 + 10^{(7.089-pH)}) + (2.487 / 1 + 10^{(6H+7.089)})) \times 2.85$ or $1.45 \times 10(0.028(25-temp))$, whichever is less
 MIN = 2.85

Calculated MIN = 1.88
 MIN Comparison = 1.88
 Calculated value is less than 2.85

Calculated Ammonia Criteria = 2.10

Chronic - Early Life Stages Absent

Calculated Ammonia Criteria = $((0.0577 / 1 + 10^{(7.089-pH)}) + (2.487 / 1 + 10^{(6H+7.089)})) \times Temp.$ in C or 7, whichever is greater
 MAX = 21.00

MAX Comparison = 21.00
 Temperature value enter will be used

Calculated Ammonia Criteria = 2.10

Total Chronic Ammonia Criteria = 2.10 mg/l as N

Parameters	Instream Background	Acute Criteria (mg/l)	Acute Baseline (mg/l)	Acute WLA (mg/l)	Antideg Acute WLA (mg/l)	SSTV = 0.4 X aWLA (mg/l)	Chronic Criteria (mg/l)	Chronic Baseline (mg/l)	Chronic WLA (mg/l)	Antideg Chronic WLA (mg/l)	SSTV = 0.6 X cWLA (mg/l)
Ammonia	ND	12.14	NA	12.14	NA	4.86	2.10	NA	2.10	NA	1.26

Notes:

- 1) ND = No Data available, and therefore the background concentrations are assumed to be Zero.
- 2) Acute Criteria = One-hour average concentration of total ammonia nitrogen in freshwater shall not exceed, more than once every three years on the average.
- 3) Chronic Criteria = the 30-day average concentration of total ammonia nitrogen where early life stages of fish are present in freshwater shall not exceed, more than once every three years on the average.
- 4) Acute criteria/WLA based on 1Q10 flow; chronic criteria/WLA based on 7Q10 flow.

FACILITY: Lightfoot Elementary School
VPDES #: VA0062961

Ammonia Calculation - Acute Ammonia Criteria for Freshwater

TIER INFORMATION: NONE

DATA ENTRY:-> Temperature **21** pH **7.80**

FT
 $FT = 10^{((.03)(20-T))}$ = 0.9332543

FPH
FPH=1 if $8.0 \leq \text{pH} \leq 9.0$ = NA
FPH= $((1+10^{(7.4-\text{pH}))})/1.25$ if $6.5 \leq \text{pH} < 8.0$ = 1.1184857
FPH= 1.1184857364428

Acute Criteria Concentration = $.52/FT/FPH/2$ = 0.2490823

Conversion from un-ionized to Total Ammonia can be calculated by using the following formulas:

Total Acute Ammonia Criteria = Calculated un-ionized ammonia criteria divided by fraction of un-ionized Ammonia

Where: Fraction of un-ionized ammonia = $1/(10^{(\text{pKa}-\text{pH})} + 1)$ Fraction= 0.0262505

where: $\text{pKa} = 0.09018 + (2729.92/273.2 + \text{temperature } ^\circ\text{C})$ pKa = 9.3693098

Total Acute Ammonia Criteria = Calculated un-ionized Ammonia Criteria divided by fraction of un-ionized Ammonia

Total Acute Ammonia Criteria = 0.2490823 / 0.0262504896 = Total Ammonia = 9.4886732

Total Ammonia is then converted to Ammonia-Nitrogen.

TOTAL ACUTE N-NH3 9.4886732 X .822 7.8186667 MG/L = **7.82**

Ammonia Calculation - Chronic Ammonia Criteria for Freshwater

TIER INFORMATION:

DATA ENTRY:-> Temperature **21** pH **7.80**

FT
 $FT = 10^{((.03)(20-T))}$ = 0.9332543

FPH
FPH=1 if $8.0 \leq \text{pH} \leq 9.0$ = NA
FPH= $((1+10^{(7.4-\text{pH}))})/1.25$ if $6.5 \leq \text{pH} < 8.0$ = 1.1184857
FPH= 1.1184857364428

Ratio
Ratio = 13.5 if $7.7 \leq \text{pH} \leq 9.0$ = 13.5
Ratio = $20.25 \times (10^{(7.7-\text{pH})})/(1+(10^{(7.4-\text{pH})}))$ if $6.5 \leq \text{pH} < 7.7$ = NA
Ratio = 13.5

Chronic Criteria Concentration = $.8/FT/FPH/RATIO$ = 0.0567709

Conversion from un-ionized to Total Ammonia can be calculated by using the following formulas:

Total Acute Ammonia Criteria = Calculated un-ionized ammonia criteria divided by fraction of un-ionized Ammonia

Where: Fraction of un-ionized ammonia = $1/(10^{(\text{pKa}-\text{pH})} + 1)$ Fraction= 0.0262505

where: $\text{pKa} = 0.09018 + (2729.92/273.2 + \text{temperature } ^\circ\text{C})$ pKa = 9.3693098

Total Acute Ammonia Criteria = Calculated un-ionized Ammonia Criteria divided by fraction of un-ionized Ammonia

Total Acute Ammonia Criteria = 0.0567709 / 0.0262505 = Total Ammonia = 2.16266056

Total Ammonia is then converted to Ammonia-Nitrogen.

TOTAL CHRONIC N-NH3 2.1626606 X .822 1.7820323 MG/L = **1.78**

Analysis of the Lightf t Elementary School STP e. uent data for Ammonia
Averaging period for standard = 30 days

The statistics for Ammonia are:

Attachment 8

Number of values	= 1
Quantification level	= .2
Number < quantification	= 0
Expected value	= 10
Variance	= 36.00001
C.V.	= .6
97th percentile	= 24.33418
Statistics used	= Reasonable potential assumptions - Type 2 data

The WLAs for Ammonia are:

Acute WLA	= 7.82
Chronic WLA	= ----
Human Health WLA	= ----

Limits are based on acute toxicity and 1 samples/month, 1 samples/week

Maximum daily limit	= 7.82
Average weekly limit	= 7.819999
Average monthly limit	= 7.819999

Note: The maximum daily limit applies to industrial dischargers
The average weekly limit applies to POTWs
The average monthly limit applies to both.

The Data are

10

The final effluent limitations will be established as 7.81999 mg/l Weekly Average which equals 7.8 mg/l and 7.81999 mg/l Monthly Average which equals 7.8 mg/l.

1999 Ammonia as N Limit

Riga Run at Route 650 (8-RIG004.52)
Stream Hardness, Temperature and pH data

Collection date	Hardness	Temperature	Temperature sorted	pH	pH Sorted
7/22/1999	22.1	23	23	--	--
9/22/1999	18.2	22.9	22.9	--	--
11/22/1999	13.7	22.68	22.68	--	--
1/19/2000	15.1	20.22	20.22	--	--
2/23/2000	19	20.18	20.18	7.24	7.24
3/8/2000	15	17.9	17.9	7.1	7.1
4/18/2000	26	14.9	14.9	7.04	7.04
5/25/2000	23	11.4	11.4	6.73	6.73
6/27/2000	19.2	11	11	6.7	6.7
7/25/2000	36	9.4	9.4	6.6	6.6
8/24/2000	13.9	4.4	4.4	6.3	6.3
7/20/2006		0.5	0.5	6.1	6.1
Average Hardness	20.1	90th percentile	22.9		7.1

Define Point of Interest

38,14,51.0 -77,57,12.0

is the Search Point

Search Point

- ☒ Change to "clicked" map point
- ☐ Fixed at 38,14,51.0 - 77,57,12.0

Show Position Rings

- ☒ Yes ☐ No

1 mile and 1/4 mile at the Search Point

Show Search Area

- ☒ Yes ☐ No

2 miles

Search Point is at map center

Base Map Choices

Topography

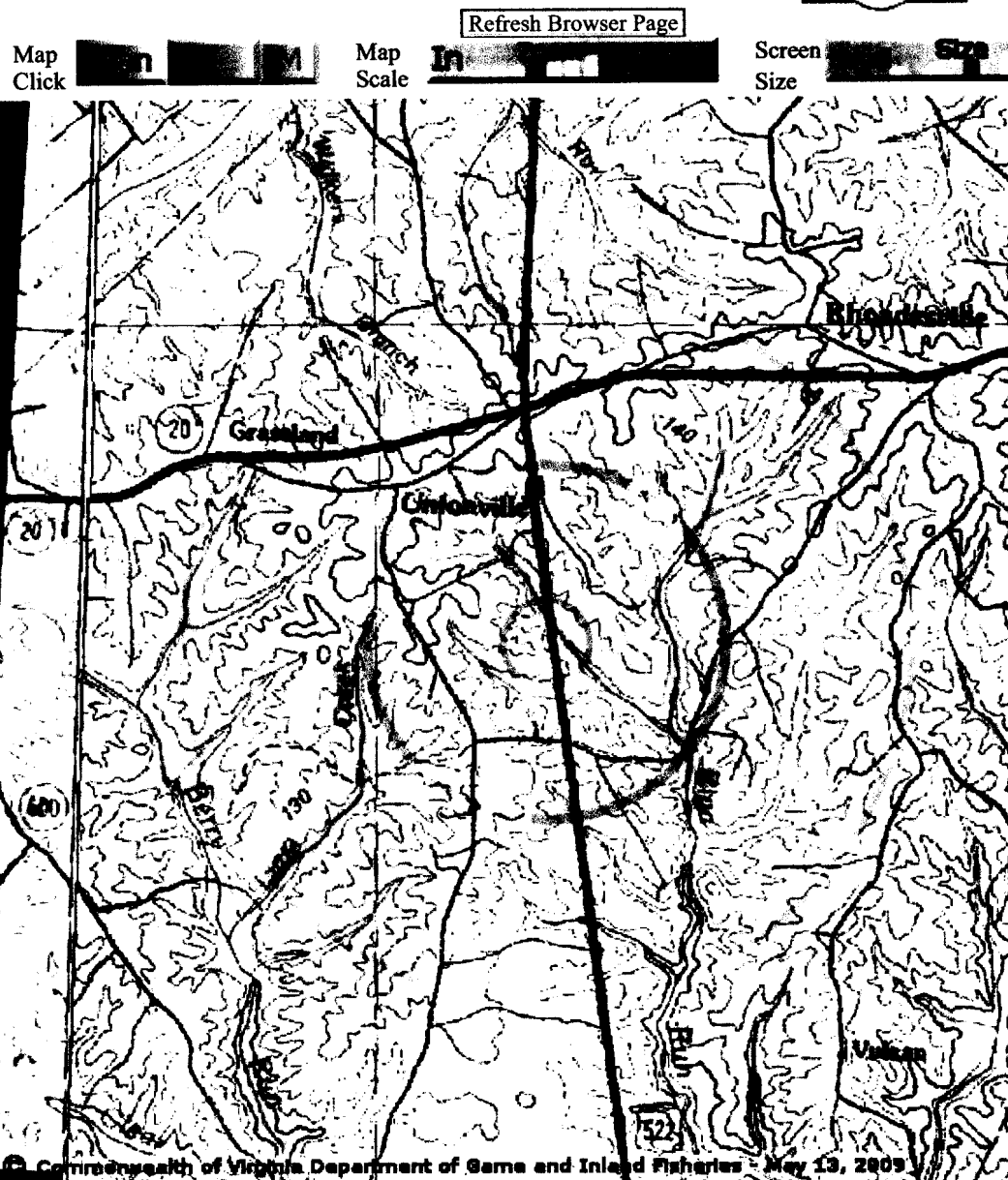
Map Overlay Choices

Current List: Position, Search

Map Overlay Legend

Position Rings
1 mile and 1 1/4 mile at the Search Point

2 mile radius Search Area



Point of Search 38,14,51.0 -77,57,12.0

Map Location 38,14,51.0 -77,57,12.0

Attachment 9

Select Coordinate System: ☒ Degrees, Minutes, Seconds Latitude - Longitude

☐ Decimal Degrees Latitude - Longitude



Virginia Department of Game and Inland Fisheries

5/13/2009 4:59:21 PM

Fish and Wildlife Information Service

VaFWIS Initial Project Assessment Report

Compiled on

[Help](#)

5/13/2009, 4:59:21 PM

Known or likely to occur within a 2 mile radius of 38,14,51. -

77,57,12.

in 137 Orange County, VA

349 Known or Likely Species ordered by Status Concern for Conservation
(displaying first 25) (25 species with Status* or Tier I**)

BOVA Code	Status*	Tier**	Common Name	Scientific Name	Confirmed	Database(s)
040129	ST	I	Sandpiper, upland	Bartramia longicauda		BOVA
040293	ST	I	Shrike, loggerhead	Lanius ludovicianus		BOVA
040093	FSST	II	Eagle, bald	Haliaeetus leucocephalus		BOVA
040292	ST		Shrike, migrant loggerhead	Lanius ludovicianus migrans		BOVA
100248	FS	I	Fritillary, regal	Speyeria idalia idalia		BOVA
060029	FSSS	III	Lance, yellow	Elliptio lanceolata		BOVA
010077	SS	I	Shiner, bridle	Notropis bifrenatus		BOVA
040266	SS	II	Wren, winter	Troglodytes troglodytes		BOVA
030063	CC	III	Turtle, spotted	Clemmys guttata		BOVA
040094	SS	III	Harrier, northern	Circus cyaneus		BOVA
040204	SS	III	Owl, barn	Tyto alba pratincola	Yes	Collections,BBA,BOVA
030012	CC	IV	Rattlesnake, timber	Crotalus horridus		BOVA
040264	SS	IV	Creeper, brown	Certhia americana		BOVA
040364	SS		Dickcissel	Spiza americana		BOVA
040032	SS		Egret, great	Ardea alba egretta		BOVA
040366	SS		Finch, purple	Carpodacus purpureus		BOVA
040285	SS		Kinglet, golden-crowned	Regulus satrapa		BOVA
			Moorhen	Gallinula		

040112	SS		<u>common</u>	chloropus cachinnans	BOVA
040262	SS		<u>Nuthatch, red- breasted</u>	Sitta canadensis	BOVA
040189	SS		<u>Tern, Caspian</u>	Sterna caspia	BOVA
040278	SS		<u>Thrush, hermit</u>	Catharus guttatus	BOVA
040314	SS		<u>Warbler, magnolia</u>	Dendroica magnolia	BOVA
050045	SS		<u>Otter, northern river</u>	Lontra canadensis lataxina	BOVA
040225		I	<u>Sapsucker, yellow-bellied</u>	Sphyrapicus varius	BOVA
040319		I	<u>Warbler, black-throated green</u>	Dendroica virens	BOVA

To view **All 349 species** [View 349](#)

* FE=Federal Endangered; FT=Federal Threatened; SE=State Endangered; ST=State Threatened; FP=Federal Proposed; FC=Federal Candidate; FS=Federal Species of Concern; SC=State Candidate; CC=Collection Concern; SS=State Special Concern

** I=VA Wildlife Action Plan - Tier I - Critical Conservation Need; II=VA Wildlife Action Plan - Tier II - Very High Conservation Need; III=VA Wildlife Action Plan - Tier III - High Conservation Need; IV=VA Wildlife Action Plan - Tier IV - Moderate Conservation Need

Anadromous Fish Use Streams

N/A

Colonial Water Bird Survey

N/A

Threatened and Endangered Waters

N/A

Cold Water Stream Survey (Trout Streams) Managed Trout Species

N/A

Public Holdings:

N/A

☐ Meters UTM NAD83 East North Zone

☐ Meters UTM NAD27 East North Zone

Base Map source: USGS 1:100,000 topographic maps (see terraser-ver-usa.com for details)

Map projection is UTM Zone 18 NAD 1983 with left 236764 and top 4242215. Pixel size is 16 meters. Coordinates displayed are Degrees, Minutes, Seconds North and West. Map is currently displayed as 600 columns by 600 rows for a total of 360000 pixels. The map display represents 9600 meters east to west, 9600 meters north to south for a total of 92.1 square kilometers. The map display represents 31501 feet to west by 31501 feet north to south for a total of 35.5 square miles.

A UTM Zone change occurs within the image. The left-hand side of the image is a pseudo projection from UTM Zone 17 into UTM Zone 18 resulting in reduced spatial accuracy within the portion of the image occurring in UTM Zone 17.

Black and white aerial photography acquired near 1990 and topographic maps are from the United States Department of the Interior, United States Geological Survey.

Shaded topographic maps are from TOPO! ©2006 National Geographic

<http://www.nationalgeographic.com/topo>

Color aerial photography acquired 2002 is from Virginia Base Mapping Program, Virginia Geographic Information Network

All other map products are from the Commonwealth of Virginia Department of Game and Inland Fisheries

map assembled 2009-05-13 16:57:51 (qa/qc April 2, 2009 16:35 - tn=237614 dist=32181)

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Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	P ar #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Conc Unit	Ex	Fi g
001	3/1/09	3/31/09	001	FLOW	0.0032	0.004	0.0092	NL	MGD		*****		*****			0	M
001	2/1/09	2/28/09	001	FLOW	0.0029	0.004	0.0092	NL	MGD		*****		*****			0	M
001	1/1/09	1/31/09	001	FLOW	0.0036	0.004	0.0092	NL	MGD		*****		*****			0	M
001	12/1/08	12/31/08	001	FLOW	0.0022	0.004	0.0053	NL	MGD		*****		*****			0	M
001	11/1/08	11/30/08	001	FLOW	0.0028	0.004	0.0092	NL	MGD		*****		*****			0	M
001	10/1/08	10/31/08	001	FLOW	0.0021	0.004	0.0053	NL	MGD		*****		*****			0	M
001	9/1/08	9/30/08	001	FLOW	0.0017	0.004	0.0053	NL	MGD		*****		*****			0	M
001	8/1/08	8/31/08	001	FLOW	0.0034	0.004	0.008	NL	MGD		*****		*****			0	M
001	7/1/08	7/31/08	001	FLOW	0.0004	0.004	0.0006	NL	MGD		*****		*****			0	M
001	6/1/08	6/30/08	001	FLOW	0.0018	0.004	0.0040	NL	MGD		*****		*****			0	M
001	5/1/08	5/31/08	001	FLOW	0.0017	0.004	0.0024	NL	MGD		*****		*****			0	M
001	4/1/08	4/30/08	001	FLOW	0.0017	0.004	0.0042	NL	MGD		*****		*****			0	M
001	3/1/08	3/31/08	001	FLOW	0.0018	0.004	0.0024	NL	MGD		*****		*****			0	M
001	2/1/08	2/29/08	001	FLOW	0.0018	0.004	0.0024	NL	MGD		*****		*****			0	M
001	1/1/08	1/31/08	001	FLOW	0.0017	0.004	0.0024	NL	MGD		*****		*****			0	M
001	12/1/07	12/31/07	001	FLOW	0.0018	0.004	0.0024	NL	MGD		*****		*****			0	M
001	11/1/07	11/30/07	001	FLOW	.0018	0.004	.0024	NL	MGD		*****		*****			0	M
001	10/1/07	10/31/07	001	FLOW	.0016	0.004	.0024	NL	MGD		*****		*****			0	M
001	9/1/07	9/30/07	001	FLOW	.0016	0.004	.0016	NL	MGD		*****		*****			0	M
001	8/1/07	8/31/07	001	FLOW	.0016	0.004	.0024	NL	MGD		*****		*****			0	M
001	7/1/07	7/31/07	001	FLOW	.0006	0.004	.0006	NL	MGD		*****		*****			0	M
001	6/1/07	6/30/07	001	FLOW	.0016	0.004	.0016	NL	MGD		*****		*****			0	M
001	5/1/07	5/31/07	001	FLOW	.0017	0.004	.0024	NL	MGD		*****		*****			0	M
001	4/1/07	4/30/07	001	FLOW	.0016	0.004	.0024	NL	MGD		*****		*****			0	M
001	3/1/07	3/31/07	001	FLOW	.0016	0.004	.0024	NL	MGD		*****		*****			0	M
001	2/1/07	2/28/07	001	FLOW	.0016	0.004	.0016	NL	MGD		*****		*****			0	M
001	1/1/07	1/31/07	001	FLOW	.0019	0.004	.0040	NL	MGD		*****		*****			0	M
001	12/1/06	12/31/06	001	FLOW	.0016	0.004	.0016	NL	MGD		*****		*****			0	M
001	11/1/06	11/30/06	001	FLOW	.0018	0.004	.0024	NL	MGD		*****		*****			0	M
001	10/1/06	10/31/06	001	FLOW	.0017	0.004	.0024	NL	MGD		*****		*****			0	M
001	9/1/06	9/30/06	001	FLOW	.0016	0.004	.0024	NL	MGD		*****		*****			0	M
001	8/1/06	8/31/06	001	FLOW	.0017	0.004	.0024	NL	MGD		*****		*****			0	M
001	7/1/06	7/31/06	001	FLOW		0.004		NL	MGD		*****		*****				M
001	6/1/06	6/30/06	001	FLOW	.0016	0.004	.0016	NL	MGD		*****		*****			0	M
001	5/1/06	5/31/06	001	FLOW	.0017	0.004	.0024	NL	MGD		*****		*****			0	M
001	4/1/06	4/30/06	001	FLOW	.0018	0.004	.0024	NL	MGD		*****		*****				M
001	3/1/06	3/31/06	001	FLOW	.0017	0.004	.0024	NL	MGD		*****		*****			0	M
001	2/1/06	2/28/06	001	FLOW	.0017	0.004	.0024	NL	MGD		*****		*****			0	M
001	1/1/06	1/31/06	001	FLOW	.0017	0.004	.0024	NL	MGD		*****		*****				M
001	12/1/05	12/31/05	001	FLOW	.0015	0.004	.0024	NL	MGD		*****		*****			0	M
001	11/1/05	11/30/05	001	FLOW	.0017	0.004	.0024	NL	MGD		*****		*****			0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	Parameter	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	Frq
001	10/1/05	10/31/05	001 FLOW	.0021	0.004	.0040	NL			*****	*****	*****	*****	*****		0	M
001	9/1/05	9/30/05	001 FLOW	.0020	0.004	.004	NL			*****	*****	*****	*****	*****			M
001	8/1/05	8/31/05	001 FLOW	.0019	0.004	.0040	NL			*****	*****	*****	*****	*****			M
001	7/1/05	7/31/05	001 FLOW		0.004		NL			*****	*****	*****	*****	*****			M
001	6/1/05	6/30/05	001 FLOW	.0015	0.004	.0016	NL			*****	*****	*****	*****	*****			M
001	5/1/05	5/31/05	001 FLOW	.0021	0.004	.0040	NL			*****	*****	*****	*****	*****			M
001	4/1/05	4/30/05	001 FLOW	.0017	0.004	.0097	NL			*****	*****	*****	*****	*****			M
001	3/1/05	3/31/05	001 FLOW	.0016	0.004	.0024	NL			*****	*****	*****	*****	*****		0	M
001	2/1/05	2/28/05	001 FLOW	.0017	0.004	.0024	NL			*****	*****	*****	*****	*****		0	M
001	1/1/05	1/31/05	001 FLOW	.0017	0.004	.004	NL			*****	*****	*****	*****	*****		0	M
001	12/1/04	12/31/04	001 FLOW	.0013	0.004	.0024	NL			*****	*****	*****	*****	*****		0	M
001	11/1/04	11/30/04	001 FLOW	.0016	0.004	.0024	NL			*****	*****	*****	*****	*****		0	M
001	10/1/04	10/31/04	001 FLOW	.0017	0.004	.0040	NL			*****	*****	*****	*****	*****		0	M
001	9/1/04	9/30/04	001 FLOW	.0021	0.004	.0090	NL			*****	*****	*****	*****	*****		0	M
001	8/1/04	8/31/04	001 FLOW	.003	0.004	.0053	NL			*****	*****	*****	*****	*****		0	M
001	7/1/04	7/31/04	001 FLOW		0.004		NL			*****	*****	*****	*****	*****			M
001	6/1/04	6/30/04	001 FLOW	.0020	0.004	.0040	NL			*****	*****	*****	*****	*****		0	M
001	5/1/04	5/31/04	001 FLOW	.0022	0.004	.004	NL			*****	*****	*****	*****	*****		0	M
001	4/1/04	4/30/04	001 FLOW	.0017	0.004	.0024	NL			*****	*****	*****	*****	*****		0	M
001	3/1/04	3/31/04	001 FLOW	.0015	0.004	.0024	NL			*****	*****	*****	*****	*****		0	M
001	2/1/04	2/29/04	001 FLOW	.0017	0.004	.0024	NL			*****	*****	*****	*****	*****		0	M
001	1/1/04	1/31/04	001 FLOW	.0017	0.004	.0080	NL			*****	*****	*****	*****	*****		0	M
001	12/1/03	12/31/03	001 FLOW	.0026	0.004	.0040	NL			*****	*****	*****	*****	*****		0	M
001	3/1/09	3/31/09	002 PH		*****		*****		6.7	6.0	*****	*****	8.1	9.0	SU	0	M
001	2/1/09	2/28/09	002 PH		*****		*****		7.0	6.0	*****	*****	8.3	9.0	SU	0	M
001	1/1/09	1/31/09	002 PH		*****		*****		7.0	6.0	*****	*****	7.4	9.0	SU	0	M
001	12/1/08	12/31/08	002 PH		*****		*****		7.2	6.0	*****	*****	7.7	9.0	SU	0	M
001	11/1/08	11/30/08	002 PH		*****		*****		7.2	6.0	*****	*****	8.0	9.0	SU	0	M
001	10/1/08	10/31/08	002 PH		*****		*****		7.1	6.0	*****	*****	8.1	9.0	SU	0	M
001	9/1/08	9/30/08	002 PH		*****		*****		6.6	6.0	*****	*****	8.1	9.0	SU	0	M
001	8/1/08	8/31/08	002 PH		*****		*****		6.7	6.0	*****	*****	7.8	9.0	SU	0	M
001	7/1/08	7/31/08	002 PH		*****		*****		7.1	6.0	*****	*****	8.2	9.0	SU	0	M
001	6/1/08	6/30/08	002 PH		*****		*****		6.4	6.0	*****	*****	7.8	9.0	SU	0	M
001	5/1/08	5/31/08	002 PH		*****		*****		6.8	6.0	*****	*****	7.8	9.0	SU	0	M
001	4/1/08	4/30/08	002 PH		*****		*****		6.5	6.0	*****	*****	7.6	9.0	SU	0	M
001	3/1/08	3/31/08	002 PH		*****		*****		6.6	6.0	*****	*****	7.3	9.0	SU	0	M
001	2/1/08	2/29/08	002 PH		*****		*****		6.5	6.0	*****	*****	7.3	9.0	SU	0	M
001	1/1/08	1/31/08	002 PH		*****		*****		6.4	6.0	*****	*****	7.3	9.0	SU	0	M
001	12/1/07	12/31/07	002 PH		*****		*****		6.2	6.0	*****	*****	7.4	9.0	SU	0	M
001	11/1/07	11/30/07	002 PH		*****		*****		6.2	6.0	*****	*****	7.0	9.0	SU	0	M
001	10/1/07	10/31/07	002 PH		*****		*****		6.2	6.0	*****	*****	7.3	9.0	SU	0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	Parameter	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	Fr
001	9/1/07	9/30/07	002	PH		*****		*****		6.3	6.0	*****	*****	7.6	9.0	SU	0	M
001	8/1/07	8/31/07	002	PH		*****		*****		6.3	6.0	*****	*****	7.6	9.0	SU	0	M
001	7/1/07	7/31/07	002	PH		*****		*****		6.4	6.0	*****	*****	6.5	9.0	SU	0	M
001	6/1/07	6/30/07	002	PH		*****		*****		6.4	6.0	*****	*****	7.3	9.0	SU	0	M
001	5/1/07	5/31/07	002	PH		*****		*****		6.5	6.0	*****	*****	7.6	9.0	SU	0	M
001	4/1/07	4/30/07	002	PH		*****		*****		6.6	6.0	*****	*****	7.5	9.0	SU	0	M
001	3/1/07	3/31/07	002	PH		*****		*****		7.0	6.0	*****	*****	8.1	9.0	SU	0	M
001	2/1/07	2/28/07	002	PH		*****		*****		7.1	6.0	*****	*****	8.3	9.0	SU	0	M
001	1/1/07	1/31/07	002	PH		*****		*****		6.3	6.0	*****	*****	7.6	9.0	SU	0	M
001	12/1/06	12/31/06	002	PH		*****		*****		6.2	6.0	*****	*****	7.2	9.0	SU	0	M
001	11/1/06	11/30/06	002	PH		*****		*****		6.2	6.0	*****	*****	7.6	9.0	SU	0	M
001	10/1/06	10/31/06	002	PH		*****		*****		6.3	6.0	*****	*****	7.5	9.0	SU	0	M
001	9/1/06	9/30/06	002	PH		*****		*****		6.6	6.0	*****	*****	7.8	9.0	SU	0	M
001	8/1/06	8/31/06	002	PH		*****		*****		6.5	6.0	*****	*****	7.3	9.0	SU	0	M
001	7/1/06	7/31/06	002	PH		*****		*****			6.0	*****	*****		9.0	SU		M
001	6/1/06	6/30/06	002	PH		*****		*****		6.5	6.0	*****	*****	7.5	9.0	SU	0	M
001	5/1/06	5/31/06	002	PH		*****		*****		6.3	6.0	*****	*****	7.3	9.0	SU	0	M
001	4/1/06	4/30/06	002	PH		*****		*****		6.5	6.0	*****	*****	7.2	9.0	SU	0	M
001	3/1/06	3/31/06	002	PH		*****		*****		6.4	6.0	*****	*****	7.4	9.0		0	M
001	2/1/06	2/28/06	002	PH		*****		*****		6.3	6.0	*****	*****	7.4	9.0		0	M
001	1/1/06	1/31/06	002	PH		*****		*****		6.4	6.0	*****	*****	7.6	9.0			M
001	12/1/05	12/31/05	002	PH		*****		*****		6.6	6.0	*****	*****	7.1	9.0		0	M
001	11/1/05	11/30/05	002	PH		*****		*****		6.6	6.0	*****	*****	7.3	9.0		0	M
001	10/1/05	10/31/05	002	PH		*****		*****		6.4	6.0	*****	*****	7.4	9.0		0	M
001	9/1/05	9/30/05	002	PH		*****		*****		6.4	6.0	*****	*****	7.3	9.0			M
001	8/1/05	8/31/05	002	PH		*****		*****		6.8	6.0	*****	*****	7.4	9.0			M
001	7/1/05	7/31/05	002	PH		*****		*****			6.0	*****	*****		9.0			M
001	6/1/05	6/30/05	002	PH		*****		*****		6.8	6.0	*****	*****	7.4	9.0			M
001	5/1/05	5/31/05	002	PH		*****		*****		6.8	6.0	*****	*****	7.6	9.0			M
001	4/1/05	4/30/05	002	PH		*****		*****		6.9	6.0	*****	*****	7.7	9.0			M
001	3/1/05	3/31/05	002	PH		*****		*****		6.2	6.0	*****	*****	7.8	9.0		0	M
001	2/1/05	2/28/05	002	PH		*****		*****		6.9	6.0	*****	*****	7.8	9.0		0	M
001	1/1/05	1/31/05	002	PH		*****		*****		6.4	6.0	*****	*****	8.1	9.0		0	M
001	12/1/04	12/31/04	002	PH		*****		*****		6.5	6.0	*****	*****	7.4	9.0		0	M
001	11/1/04	11/30/04	002	PH		*****		*****		6.4	6.0	*****	*****	7.5	9.0		0	M
001	10/1/04	10/31/04	002	PH		*****		*****		6.4	6.0	*****	*****	7.3	9.0		0	M
001	9/1/04	9/30/04	002	PH		*****		*****		6.1	6.0	*****	*****	7.5	9.0		0	M
001	8/1/04	8/31/04	002	PH		*****		*****		6.8	6.0	*****	*****	7.9	9.0		0	M
001	7/1/04	7/31/04	002	PH		*****		*****			6.0	*****	*****		9.0			M
001	6/1/04	6/30/04	002	PH		*****		*****		6.4	6.0	*****	*****	6.9	9.0		0	M
001	5/1/04	5/31/04	002	PH		*****		*****		6.5	6.0	*****	*****	7.5	9.0		0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	T _{SS}
001	4/1/04	4/30/04	PH		*****		*****		6.5		*****	7.1	9.0		0	M
001	3/1/04	3/31/04	PH		*****		*****		6.7		*****	7.8	9.0		0	M
001	2/1/04	2/29/04	PH		*****		*****		6.9		*****	7.7	9.0		0	M
001	1/1/04	1/31/04	PH		*****		*****		6.8		*****	7.8	9.0		0	M
001	12/1/03	12/31/03	PH		*****		*****		6.5		*****	7.8	9.0		0	M
001	3/1/09	3/31/09	BOD5	0.005	0.4	0.005	0.6	KG/D		6	24	6	36	MGL	0	M
001	2/1/09	2/28/09	BOD5	0.036	0.4	0.036	0.6	KG/D		6	24	6	36	MGL	0	M
001	1/1/09	1/31/09	BOD5	0.09	0.4	0.09	0.6	KG/D		6	24	6	36	MGL	0	M
001	12/1/08	12/31/08	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	11/1/08	11/30/08	BOD5	0.09	0.4	0.09	0.6	KG/D		6	24	6	36	MGL	0	M
001	10/1/08	10/31/08	BOD5	0.014	0.4	0.014	0.6	KG/D		6	24	6	36	MGL	0	M
001	9/1/08	9/30/08	BOD5	0.045	0.4	0.045	0.6	KG/D		5	24	5	36	MGL	0	M
001	8/1/08	8/31/08	BOD5	0.024	0.4	0.024	0.6	KG/D		4	24	4	36	MGL	0	M
001	7/1/08	7/31/08	BOD5	0.009	0.4	0.009	0.6	KG/D		5	24	5	36	MGL	0	M
001	6/1/08	6/30/08	BOD5	0.05	0.4	0.05	0.6	KG/D		5	24	5	36	MGL	0	M
001	5/1/08	5/31/08	BOD5	0.03	0.4	0.03	0.6	KG/D		5	24	5	36	MGL	0	M
001	4/1/08	4/30/08	BOD5	0.11	0.4	0.11	0.6	KG/D		7	24	7	36	MGL	0	M
001	3/1/08	3/31/08	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	2/1/08	2/29/08	BOD5	0.06	0.4	0.06	0.6	KG/D		7	24	7	36	MGL	0	M
001	1/1/08	1/31/08	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	12/1/07	12/31/07	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	11/1/07	11/30/07	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	10/1/07	10/31/07	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	9/1/07	9/30/07	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	8/1/07	8/31/07	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	7/1/07	7/31/07	BOD5	0.02	0.4	0.02	0.6	KG/D		7	24	7	36	MGL	0	M
001	6/1/07	6/30/07	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M
001	5/1/07	5/31/07	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M
001	4/1/07	4/30/07	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M
001	3/1/07	3/31/07	BOD5	0.04	0.4	0.04	0.6	KG/D		7	24	7	36	MGL	0	M
001	2/1/07	2/28/07	BOD5	0.5	0.4	0.05	0.6	KG/D		8	24	8	36	MGL	0	M
001	1/1/07	1/31/07	BOD5	0.03	0.4	0.03	0.6	KG/D		5	24	5	36	MGL	0	M
001	12/1/06	12/31/06	BOD5	0.03	0.4	0.03	0.6	KG/D		5	24	5	36	MGL	0	M
001	11/1/06	11/30/06	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M
001	10/1/06	10/31/06	BOD5	0.03	0.4	0.03	0.6	KG/D		5	24	5	36	MGL	0	M
001	9/1/06	9/30/06	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M
001	8/1/06	8/31/06	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M
001	7/1/06	7/31/06	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M
001	6/1/06	6/30/06	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M
001	5/1/06	5/31/06	BOD5	0.03	0.4	0.03	0.6	KG/D		5	24	5	36	MGL	0	M
001	4/1/06	4/30/06	BOD5	0.04	0.4	0.04	0.6	KG/D		6	24	6	36	MGL	0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	P g #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	T g g
001	3/1/06	3/31/06	003	BOD5	.04	0.4	.04	0.6			*****	7	24	7	36		0	M
001	2/1/06	2/28/06	003	BOD5	.05	0.4	.05	0.6			*****	5	24	5	36		0	M
001	1/1/06	1/31/06	003	BOD5	.06	0.4	.06	0.6			*****	7	24	7	36			M
001	12/1/05	12/31/05	003	BOD5	.04	0.4	.04	0.6			*****	7	24	7	36		0	M
001	11/1/05	11/30/05	003	BOD5	.042	0.4	.042	0.6			*****	7	24	7	36		0	M
001	10/1/05	10/31/05	003	BOD5	.04	0.4	.04	0.6			*****	6	24	6	36		0	M
001	9/1/05	9/30/05	003	BOD5	.05	0.4	.05	0.6			*****	5	24	5	36			M
001	8/1/05	8/31/05	003	BOD5	.03	0.4	.03	0.6			*****	5	24	5	36			M
001	7/1/05	7/31/05	003	BOD5		0.4		0.6			*****		24		36			M
001	6/1/05	6/30/05	003	BOD5	.04	0.4	.04	0.6			*****	6	24	6	36			M
001	5/1/05	5/31/05	003	BOD5	.04	0.4	.04	0.6			*****	6	24	6	36			M
001	4/1/05	4/30/05	003	BOD5	.036	0.4	.036	0.6			*****	6	24	6	36			M
001	3/1/05	3/31/05	003	BOD5	.05	0.4	.05	0.6			*****	8	24	8	36		0	M
001	2/1/05	2/28/05	003	BOD5	.05	0.4	.05	0.6			*****	8	24	8	36		0	M
001	1/1/05	1/31/05	003	BOD5	.04	0.4	.04	0.6			*****	7	24	7	36		0	M
001	12/1/04	12/31/04	003	BOD5	.04	0.4	.04	0.6			*****	7	24	7	36		0	M
001	11/1/04	11/30/04	003	BOD5	.042	0.4	.042	0.6			*****	7	24	7	36		0	M
001	10/1/04	10/31/04	003	BOD5	.05	0.4	.05	0.6			*****	9	24	9	36		0	M
001	9/1/04	9/30/04	003	BOD5	.05	0.4	.05	0.6			*****	8	24	8	36		0	M
001	8/1/04	8/31/04	003	BOD5	.06	0.4	.06	0.6			*****	10	24	10	36		0	M
001	7/1/04	7/31/04	003	BOD5		0.4		0.6			*****		24		36			M
001	6/1/04	6/30/04	003	BOD5	.10	0.4	.10	0.6			*****	16.4	24	16.4	36		0	M
001	5/1/04	5/31/04	003	BOD5	.04	0.4	.04	0.6			*****	7	24	7	36		0	M
001	4/1/04	4/30/04	003	BOD5	.13	0.4	.13	0.6			*****	14	24	14	36		0	M
001	3/1/04	3/31/04	003	BOD5	.07	0.4	.07	0.6			*****	12	24	12	36		0	M
001	2/1/04	2/29/04	003	BOD5	.03	0.4	.03	0.6			*****	5	24	5	36		0	M
001	1/1/04	1/31/04	003	BOD5	.05	0.4	.05	0.6			*****	8	24	8	36		0	M
001	12/1/03	12/31/03	003	BOD5	.07	0.4	.07	0.6			*****	11	24	11	36		0	M
001	3/1/09	3/31/09	004	TSS	0.006	0.4	0.006	0.6	KG		*****	8.3	24	8.3	36	MGL	0	M
001	2/1/09	2/28/09	004	TSS	0.047	0.4	0.047	0.6	KG		*****	7.7	24	7.7	36	MGL	0	M
001	1/1/09	1/31/09	004	TSS	0.10	0.4	0.10	0.6	KG		*****	6.9	24	6.9	36	MGL	0	M
001	12/1/08	12/31/08	004	TSS	0.04	0.4	0.04	0.6	KG		*****	6.6	24	6.6	36	MGL	0	M
001	11/1/08	11/30/08	004	TSS	0.09	0.4	0.09	0.6	KG		*****	5.8	24	5.8	36	MGL	0	M
001	10/1/08	10/31/08	004	TSS	0.015	0.4	0.015	0.6	KG		*****	6.6	24	6.6	36	MGL	0	M
001	9/1/08	9/30/08	004	TSS	0.050	0.4	0.050	0.6	KG		*****	5.5	24	5.5	36	MGL	0	M
001	8/1/08	8/31/08	004	TSS	0.041	0.4	0.041	0.6	KG		*****	6.7	24	6.7	36	MGL	0	M
001	7/1/08	7/31/08	004	TSS	0.014	0.4	0.014	0.6	KG		*****	7.2	24	7.2	36	MGL	0	M
001	6/1/08	6/30/08	004	TSS	0.05	0.4	0.05	0.6	KG		*****	6.0	24	6.0	36	MGL	0	M
001	5/1/08	5/31/08	004	TSS	0.04	0.4	0.04	0.6	KG		*****	6.6	24	6.6	36	MGL	0	M
001	4/1/08	4/30/08	004	TSS	0.10	0.4	0.10	0.6	KG		*****	6.0	24	6.0	36	MGL	0	M
001	3/1/08	3/31/08	004	TSS	0.06	0.4	0.06	0.6	KG		*****	6.2	24	6.2	36	MGL	0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	TSS
001	2/1/08	2/29/08	TSS	0.08	0.4	0.08	0.6	KGD		*****	8.4	24	8.4	36	MGL	0	M
001	1/1/08	1/31/08	TSS	0.02	0.4	0.02	0.6	KGD		*****	3.8	24	3.8	36	MGL	0	M
001	12/1/07	12/31/07	TSS	0.04	0.4	0.04	0.6	KGD		*****	6.8	24	6.8	36	MGL	0	M
001	11/1/07	11/30/07	TSS	.05	0.4	.05	0.6	KGD		*****	7.8	24	7.8	36	MGL	0	M
001	10/1/07	10/31/07	TSS	.03	0.4	.03	0.6	KGD		*****	5.3	24	5.3	36	MGL	0	M
001	9/1/07	9/30/07	TSS	.04	0.4	.04	0.6	KGD		*****	6.4	24	6.4	36	MGL	0	M
001	8/1/07	8/31/07	TSS	.04	0.4	.04	0.6	KGD		*****	7.2	24	7.2	36	MGL	0	M
001	7/1/07	7/31/07	TSS	.01	0.4	.01	0.6	KGD		*****	5.2	24	5.2	36	MGL	0	M
001	6/1/07	6/30/07	TSS	.03	0.4	.03	0.6	KGD		*****	4.7	24	4.7	36	MGL	0	M
001	5/1/07	5/31/07	TSS	.05	0.4	.05	0.6	KGD		*****	8.4	24	8.4	36	MGL	0	M
001	4/1/07	4/30/07	TSS	.05	0.4	.05	0.6	KGD		*****	8.6	24	8.6	36	MGL	0	M
001	3/1/07	3/31/07	TSS	.04	0.4	.04	0.6	KGD		*****	7.3	24	7.3	36	MGL	0	M
001	2/1/07	2/28/07	TSS	.04	0.4	.04	0.6	KGD		*****	6.6	24	6.6	36	MGL	0	M
001	1/1/07	1/31/07	TSS	.05	0.4	.05	0.6	KGD		*****	7.5	24	7.5	36	MGL	0	M
001	12/1/06	12/31/06	TSS	.04	0.4	.04	0.6	KGD		*****	6.7	24	6.7	36	MGL	0	M
001	11/1/06	11/30/06	TSS	.04	0.4	.04	0.6	KGD		*****	6.6	24	6.6	36	MGL	0	M
001	10/1/06	10/31/06	TSS	.04	0.4	.04	0.6	KGD		*****	4.8	24	4.8	36	MGL	0	M
001	9/1/06	9/30/06	TSS	.03	0.4	.03	0.6	KGD		*****	5.6	24	5.6	36	MGL	0	M
001	8/1/06	8/31/06	TSS	.04	0.4	.04	0.6	KGD		*****	6.4	24	6.4	36	MGL	0	M
001	7/1/06	7/31/06	TSS		0.4		0.6	KGD		*****		24		36	MGL		M
001	6/1/06	6/30/06	TSS	.03	0.4	.03	0.6	KGD		*****	5.4	24	5.4	36	MGL	0	M
001	5/1/06	5/31/06	TSS	.05	0.4	.05	0.6	KGD		*****	6.2	24	6.2	36	MGL	0	M
001	4/1/06	4/30/06	TSS	.05	0.4	.05	0.6	KGD		*****	8.4	24	8.4	36	MGL	0	M
001	3/1/06	3/31/06	TSS	.04	0.4	.04	0.6	KGD		*****	7.2	24	7.2	36		0	M
001	2/1/06	2/28/06	TSS	.04	0.4	.04	0.6	KGD		*****	7.1	24	7.1	36		0	M
001	1/1/06	1/31/06	TSS	.07	0.4	.07	0.6	KGD		*****	8.2	24	8.2	36			M
001	12/1/05	12/31/05	TSS	.03	0.4	.03	0.6	KGD		*****	5.5	24	5.5	36		0	M
001	11/1/05	11/30/05	TSS	.033	0.4	.033	0.6	KGD		*****	5.4	24	5.4	36		0	M
001	10/1/05	10/31/05	TSS	.05	0.4	.05	0.6	KGD		*****	7.6	24	7.6	36		0	M
001	9/1/05	9/30/05	TSS	.06	0.4	.06	0.6	KGD		*****	7.1	24	7.1	36			M
001	8/1/05	8/31/05	TSS	.05	0.4	.05	0.6	KGD		*****	8.3	24	8.3	36			M
001	7/1/05	7/31/05	TSS		0.4		0.6	KGD		*****		24		36			M
001	6/1/05	6/30/05	TSS	.04	0.4	.04	0.6	KGD		*****	6.7	24	6.7	36			M
001	5/1/05	5/31/05	TSS	.04	0.4	.04	0.6	KGD		*****	6.1	24	6.1	36			M
001	4/1/05	4/30/05	TSS	.041	0.4	.041	0.6	KGD		*****	6.7	24	6.7	36			M
001	3/1/05	3/31/05	TSS	.05	0.4	.05	0.6	KGD		*****	7.6	24	7.6	36		0	M
001	2/1/05	2/28/05	TSS	.05	0.4	.05	0.6	KGD		*****	7.8	24	7.8	36		0	M
001	1/1/05	1/31/05	TSS	.05	0.4	.05	0.6	KGD		*****	8.3	24	8.3	36		0	M
001	12/1/04	12/31/04	TSS	.04	0.4	.04	0.6	KGD		*****	7.3	24	7.3	36		0	M
001	11/1/04	11/30/04	TSS	.053	0.4	.053	0.6	KGD		*****	8.8	24	8.8	36		0	M
001	10/1/04	10/31/04	TSS	.05	0.4	.05	0.6	KGD		*****	8.0	24	8.0	36		0	M

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Outfall	Monitor Start Date	Monitor End Date	Pg #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	Tg
001	9/1/04	9/30/04	004	TSS	.05	0.4	.05	0.6			*****	8.3	24	8.3	36		0	M
001	8/1/04	8/31/04	004	TSS	.09	0.4	.09	0.6			*****	14.4	24	14.4	36		0	M
001	7/1/04	7/31/04	004	TSS		0.4		0.6			*****		24		36			M
001	6/1/04	6/30/04	004	TSS	.05	0.4	.05	0.6			*****	8.6	24	8.6	36		0	M
001	5/1/04	5/31/04	004	TSS	.05	0.4	.05	0.6			*****	7.8	24	7.8	36		0	M
001	4/1/04	4/30/04	004	TSS	.02	0.4	.02	0.6			*****	4.1	24	4.1	36		0	M
001	3/1/04	3/31/04	004	TSS	.04	0.4	.04	0.6			*****	7.4	24	7.4	36		0	M
001	2/1/04	2/29/04	004	TSS	.05	0.4	.05	0.6			*****	8.4	24	8.4	36		0	M
001	1/1/04	1/31/04	004	TSS	.06	0.4	.06	0.6			*****	9.1	24	9.1	36		0	M
001	12/1/03	12/31/03	004	TSS	.05	0.4	.05	0.6			*****	7.8	24.0	7.8	36.0		0	M
001	3/1/09	3/31/09	007	DO		*****		*****		7.6	5.0	*****	*****	*****	*****	MGL	0	M
001	2/1/09	2/28/09	007	DO		*****		*****		9.7	5.0	*****	*****	*****	*****	MGL	0	M
001	1/1/09	1/31/09	007	DO		*****		*****		9.4	5.0	*****	*****	*****	*****	MGL	0	M
001	12/1/08	12/31/08	007	DO		*****		*****		9.4	5.0	*****	*****	*****	*****	MGL	0	M
001	11/1/08	11/30/08	007	DO		*****		*****		8.1	5.0	*****	*****	*****	*****	MGL	0	M
001	10/1/08	10/31/08	007	DO		*****		*****		7.2	5.0	*****	*****	*****	*****	MGL	0	M
001	9/1/08	9/30/08	007	DO		*****		*****		6.3	5.0	*****	*****	*****	*****	MGL	0	M
001	8/1/08	8/31/08	007	DO		*****		*****		6.6	5.0	*****	*****	*****	*****	MGL	0	M
001	7/1/08	7/31/08	007	DO		*****		*****		6.2	5.0	*****	*****	*****	*****	MGL	0	M
001	6/1/08	6/30/08	007	DO		*****		*****		6.3	5.0	*****	*****	*****	*****	MGL	0	M
001	5/1/08	5/31/08	007	DO		*****		*****		7.1	5.0	*****	*****	*****	*****	MGL	0	M
001	4/1/08	4/30/08	007	DO		*****		*****		7.6	5.0	*****	*****	*****	*****	MGL	0	M
001	3/1/08	3/31/08	007	DO		*****		*****		7.9	5.0	*****	*****	*****	*****	MGL	0	M
001	2/1/08	2/29/08	007	DO		*****		*****		7.3	5.0	*****	*****	*****	*****	MGL	0	M
001	1/1/08	1/31/08	007	DO		*****		*****		8.6	5.0	*****	*****	*****	*****	MGL	0	M
001	12/1/07	12/31/07	007	DO		*****		*****		8.4	5.0	*****	*****	*****	*****	MGL	0	M
001	11/1/07	11/30/07	007	DO		*****		*****		8.1	5.0	*****	*****	*****	*****	MGL	0	M
001	10/1/07	10/31/07	007	DO		*****		*****		7.9	5.0	*****	*****	*****	*****	MGL	0	M
001	9/1/07	9/30/07	007	DO		*****		*****		7.1	5.0	*****	*****	*****	*****	MGL	0	M
001	8/1/07	8/31/07	007	DO		*****		*****		7.2	5.0	*****	*****	*****	*****	MGL	0	M
001	7/1/07	7/31/07	007	DO		*****		*****		7.8	5.0	*****	*****	*****	*****	MGL	0	M
001	6/1/07	6/30/07	007	DO		*****		*****		7.1	5.0	*****	*****	*****	*****	MGL	0	M
001	5/1/07	5/31/07	007	DO		*****		*****		7.4	5.0	*****	*****	*****	*****	MGL	0	M
001	4/1/07	4/30/07	007	DO		*****		*****		8.0	5.0	*****	*****	*****	*****	MGL	0	M
001	3/1/07	3/31/07	007	DO		*****		*****		8.1	5.0	*****	*****	*****	*****	MGL	0	M
001	2/1/07	2/28/07	007	DO		*****		*****		8.2	5.0	*****	*****	*****	*****	MGL	0	M
001	1/1/07	1/31/07	007	DO		*****		*****		11.4	5.0	*****	*****	*****	*****	MGL	0	M
001	12/1/06	12/31/06	007	DO		*****		*****		10.2	5.0	*****	*****	*****	*****	MGL	0	M
001	11/1/06	11/30/06	007	DO		*****		*****		8.4	5.0	*****	*****	*****	*****	MGL	0	M
001	10/1/06	10/31/06	007	DO		*****		*****		8.2	5.0	*****	*****	*****	*****	MGL	0	M
001	9/1/06	9/30/06	007	DO		*****		*****		7.4	5.0	*****	*****	*****	*****	MGL	0	M

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Outfall	Monitor Start Date	Monitor End Date	Pg #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	T g
001	8/1/06	8/31/06	007	DO	*****	*****	*****	*****		7.2	5.0	*****	*****	*****	*****	MGL	0	M
001	7/1/06	7/31/06	007	DO	*****	*****	*****	*****			5.0	*****	*****	*****	*****	MGL		M
001	6/1/06	6/30/06	007	DO	*****	*****	*****	*****		8.2	5.0	*****	*****	*****	*****	MGL	0	M
001	5/1/06	5/31/06	007	DO	*****	*****	*****	*****		8.2	5.0	*****	*****	*****	*****	MGL	0	M
001	4/1/06	4/30/06	007	DO	*****	*****	*****	*****		7.6	5.0	*****	*****	*****	*****	MGL	0	M
001	3/1/06	3/31/06	007	DO	*****	*****	*****	*****		9.1	5.0	*****	*****	*****	*****		0	M
001	2/1/06	2/28/06	007	DO	*****	*****	*****	*****		10.2	5.0	*****	*****	*****	*****		0	M
001	1/1/06	1/31/06	007	DO	*****	*****	*****	*****		7.4	5.0	*****	*****	*****	*****			M
001	12/1/05	12/31/05	007	DO	*****	*****	*****	*****		7.5	5.0	*****	*****	*****	*****		0	M
001	11/1/05	11/30/05	007	DO	*****	*****	*****	*****		8.5	5.0	*****	*****	*****	*****		0	M
001	10/1/05	10/31/05	007	DO	*****	*****	*****	*****		7.2	5.0	*****	*****	*****	*****		0	M
001	9/1/05	9/30/05	007	DO	*****	*****	*****	*****		6.7	5.0	*****	*****	*****	*****			M
001	8/1/05	8/31/05	007	DO	*****	*****	*****	*****		6.5	5.0	*****	*****	*****	*****			M
001	7/1/05	7/31/05	007	DO	*****	*****	*****	*****			5.0	*****	*****	*****	*****			M
001	6/1/05	6/30/05	007	DO	*****	*****	*****	*****		7.3	5.0	*****	*****	*****	*****			M
001	5/1/05	5/31/05	007	DO	*****	*****	*****	*****		6.8	5.0	*****	*****	*****	*****			M
001	4/1/05	4/30/05	007	DO	*****	*****	*****	*****		7.8	5.0	*****	*****	*****	*****			M
001	3/1/05	3/31/05	007	DO	*****	*****	*****	*****		7.9	5.0	*****	*****	*****	*****		0	M
001	2/1/05	2/28/05	007	DO	*****	*****	*****	*****		8.6	5.0	*****	*****	*****	*****		0	M
001	1/1/05	1/31/05	007	DO	*****	*****	*****	*****		8.0	5.0	*****	*****	*****	*****		0	M
001	12/1/04	12/31/04	007	DO	*****	*****	*****	*****		7.8	5.0	*****	*****	*****	*****		0	M
001	11/1/04	11/30/04	007	DO	*****	*****	*****	*****		6.8	5.0	*****	*****	*****	*****		0	M
001	10/1/04	10/31/04	007	DO	*****	*****	*****	*****		6.9	5.0	*****	*****	*****	*****		0	M
001	9/1/04	9/30/04	007	DO	*****	*****	*****	*****		6.3	5.0	*****	*****	*****	*****		0	M
001	8/1/04	8/31/04	007	DO	*****	*****	*****	*****		6.1	5.0	*****	*****	*****	*****		0	M
001	7/1/04	7/31/04	007	DO	*****	*****	*****	*****			5.0	*****	*****	*****	*****			M
001	6/1/04	6/30/04	007	DO	*****	*****	*****	*****		7.3	5.0	*****	*****	*****	*****		0	M
001	5/1/04	5/31/04	007	DO	*****	*****	*****	*****		6.9	5.0	*****	*****	*****	*****		0	M
001	4/1/04	4/30/04	007	DO	*****	*****	*****	*****		7.6	5.0	*****	*****	*****	*****		0	M
001	3/1/04	3/31/04	007	DO	*****	*****	*****	*****		8.6	5.0	*****	*****	*****	*****		0	M
001	2/1/04	2/29/04	007	DO	*****	*****	*****	*****		10.1	5.0	*****	*****	*****	*****		0	M
001	1/1/04	1/31/04	007	DO	*****	*****	*****	*****		9.6	5.0	*****	*****	*****	*****		0	M
001	12/1/03	12/31/03	007	DO	*****	*****	*****	*****		8.5	5.0	*****	*****	*****	*****		0	M
001	3/1/09	3/31/09	039	AMMONIA, AS N	*****	*****	*****	*****			*****	1.5	7.8	1.5	7.8	MGL	0	M
001	2/1/09	2/28/09	039	AMMONIA, AS N	*****	*****	*****	*****			*****	5.2	7.8	5.2	7.8	MGL	0	M
001	1/1/09	1/31/09	039	AMMONIA, AS N	*****	*****	*****	*****			*****	4.4	7.8	4.4	7.8	MGL	0	M
001	12/1/08	12/31/08	039	AMMONIA, AS N	*****	*****	*****	*****			*****	2.9	7.8	2.9	7.8	MGL	0	M
001	11/1/08	11/30/08	039	AMMONIA, AS N	*****	*****	*****	*****			*****	4.2	7.8	4.2	7.8	MGL	0	M
001	10/1/08	10/31/08	039	AMMONIA, AS N	*****	*****	*****	*****			*****	1.9	7.8	1.9	7.8	MGL	0	M
001	9/1/08	9/30/08	039	AMMONIA, AS N	*****	*****	*****	*****			*****	1.6	7.8	1.6	7.8	MGL	0	M
001	8/1/08	8/31/08	039	AMMONIA, AS N	*****	*****	*****	*****			*****	0.5	7.8	0.5	7.8	MGL	0	M

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Outfall	Monitor Start Date	Monitor End Date	P g #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	QTY Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	T g
001	1/1/04	7/31/08	039	AMMONIA, AS N		*****		*****			*****	0.7	7.8	0.7	7.8	MGL	0	M
001	6/1/08	6/30/08	039	AMMONIA, AS N		*****		*****			*****	1.9	7.8	1.9	7.8	MGL	0	M
001	5/1/08	5/31/08	039	AMMONIA, AS N		*****		*****			*****	2.5	7.8	2.5	7.8	MGL	0	M
001	4/1/08	4/30/08	039	AMMONIA, AS N		*****		*****			*****	5.8	7.8	5.8	7.8	MGL	0	M
001	3/1/08	3/31/08	039	AMMONIA, AS N		*****		*****			*****	5.4	7.8	5.4	7.8	MGL	0	M
001	2/1/08	2/29/08	039	AMMONIA, AS N		*****		*****			*****	3.4	7.8	3.4	7.8	MGL	0	M
001	1/1/08	1/31/08	039	AMMONIA, AS N		*****		*****			*****	6.4	7.8	6.4	7.8	MGL	0	M
001	12/1/07	12/31/07	039	AMMONIA, AS N		*****		*****			*****	2.5	7.8	2.5	7.8	MGL	0	M
001	11/1/07	11/30/07	039	AMMONIA, AS N		*****		*****			*****	5.4	7.8	5.4	7.8	MGL	0	M
001	10/1/07	10/31/07	039	AMMONIA, AS N		*****		*****			*****	1.7	7.8	1.7	7.8	MGL	0	M
001	9/1/07	9/30/07	039	AMMONIA, AS N		*****		*****			*****	1.0	7.8	1.0	7.8	MGL	0	M
001	8/1/07	8/31/07	039	AMMONIA, AS N		*****		*****			*****	6.5	7.8	6.5	7.8	MGL	0	M
001	7/1/07	7/31/07	039	AMMONIA, AS N		*****		*****			*****	5.4	7.8	5.4	7.8	MGL	0	M
001	6/1/07	6/30/07	039	AMMONIA, AS N		*****		*****			*****	1.3	7.8	1.3	7.8	MGL	0	M
001	5/1/07	5/31/07	039	AMMONIA, AS N		*****		*****			*****	5.2	7.8	5.2	7.8	MGL	0	M
001	4/1/07	4/30/07	039	AMMONIA, AS N		*****		*****			*****	2.8	7.8	2.8	7.8	MGL	0	M
001	3/1/07	3/31/07	039	AMMONIA, AS N		*****		*****			*****	13.3	7.8	13.3	7.8	MGL	2	M
001	2/1/07	2/28/07	039	AMMONIA, AS N		*****		*****			*****	5.0	7.8	5.0	7.8	MGL	0	M
001	1/1/07	1/31/07	039	AMMONIA, AS N		*****		*****			*****	4.9	7.8	4.9	7.8	MGL	0	M
001	12/1/06	12/31/06	039	AMMONIA, AS N		*****		*****			*****	3.2	7.8	3.2	7.8	MGL	0	M
001	11/1/06	11/30/06	039	AMMONIA, AS N		*****		*****			*****	.4	7.8	.4	7.8	MGL	0	M
001	10/1/06	10/31/06	039	AMMONIA, AS N		*****		*****			*****	1.9	7.8	1.9	7.8	MGL	0	M
001	9/1/06	9/30/06	039	AMMONIA, AS N		*****		*****			*****	5.4	7.8	5.4	7.8	MGL	0	M
001	8/1/06	8/31/06	039	AMMONIA, AS N		*****		*****			*****	5.4	7.8	5.4	7.8	MGL	0	M
001	7/1/06	7/31/06	039	AMMONIA, AS N		*****		*****			*****		7.8		7.8	MGL		M
001	6/1/06	6/30/06	039	AMMONIA, AS N		*****		*****			*****	.3	7.8	.3	7.8	MGL	0	M
001	5/1/06	5/31/06	039	AMMONIA, AS N		*****		*****			*****	.4	7.8	.4	7.8	MGL	0	M
001	4/1/06	4/30/06	039	AMMONIA, AS N		*****		*****			*****	1.2	7.8	1.2	7.8	MGL	0	M
001	3/1/06	3/31/06	039	AMMONIA, AS N		*****		*****			*****	.9	7.8	.9	7.8		0	M
001	2/1/06	2/28/06	039	AMMONIA, AS N		*****		*****			*****	.2	7.8	.2	7.8		0	M
001	1/1/06	1/31/06	039	AMMONIA, AS N		*****		*****			*****	.3	7.8	.3	7.8			M
001	12/1/05	12/31/05	039	AMMONIA, AS N		*****		*****			*****	3.0	7.8	3.0	7.8		0	M
001	11/1/05	11/30/05	039	AMMONIA, AS N		*****		*****			*****	1.3	7.8	1.3	7.8		0	M
001	10/1/05	10/31/05	039	AMMONIA, AS N		*****		*****			*****	1.2	7.8	1.2	7.8		0	M
001	9/1/05	9/30/05	039	AMMONIA, AS N		*****		*****			*****	.6	7.8	.6	7.8			M
001	8/1/05	8/31/05	039	AMMONIA, AS N		*****		*****			*****	3.8	7.8	3.8	7.8			M
001	7/1/05	7/31/05	039	AMMONIA, AS N		*****		*****			*****		7.8		7.8			M
001	6/1/05	6/30/05	039	AMMONIA, AS N		*****		*****			*****	<QL	7.8	<QL	7.8			M
001	5/1/05	5/31/05	039	AMMONIA, AS N		*****		*****			*****	3.3	7.8	3.3	7.8			M
001	4/1/05	4/30/05	039	AMMONIA, AS N		*****		*****			*****	1.2	7.8	1.2	7.8			M
001	3/1/05	3/31/05	039	AMMONIA, AS N		*****		*****			*****	4.8	7.8	4.8	7.8		0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	P g #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	T g
001	2/1/05	2/28/05	039	AMMONIA, AS N		*****		*****			*****	5.3	7.8	5.3	7.8		0	M
001	1/1/05	1/31/05	039	AMMONIA, AS N		*****		*****			*****	5.3	7.8	5.3	7.8		0	M
001	12/1/04	12/31/04	039	AMMONIA, AS N		*****		*****			*****	6.0	7.8	6.0	7.8		0	M
001	11/1/04	11/30/04	039	AMMONIA, AS N		*****		*****			*****	1.8	7.8	1.8	7.8		0	M
001	10/1/04	10/31/04	039	AMMONIA, AS N		*****		*****			*****	3.6	7.8	3.6	7.8		0	M
001	9/1/04	9/30/04	039	AMMONIA, AS N		*****		*****			*****	4.4	7.8	4.4	7.8		0	M
001	8/1/04	8/31/04	039	AMMONIA, AS N		*****		*****			*****	1.2	7.8	1.2	7.8		0	M
001	7/1/04	7/31/04	039	AMMONIA, AS N		*****		*****			*****	7.8	7.8	7.8	7.8			M
001	6/1/04	6/30/04	039	AMMONIA, AS N		*****		*****			*****	3.6	7.8	3.6	7.8		0	M
001	5/1/04	5/31/04	039	AMMONIA, AS N		*****		*****			*****	4.3	7.8	4.3	7.8		0	M
001	4/1/04	4/30/04	039	AMMONIA, AS N		*****		*****			*****	2.0	7.8	2.0	7.8		0	M
001	3/1/04	3/31/04	039	AMMONIA, AS N		*****		*****			*****	4.3	7.8	4.3	7.8		0	M
001	2/1/04	2/29/04	039	AMMONIA, AS N		*****		*****			*****	4.5	7.8	4.5	7.8		0	M
001	1/1/04	1/31/04	039	AMMONIA, AS N		*****		*****			*****	4.4	7.8	4.4	7.8		0	M
001	12/1/03	12/31/03	039	AMMONIA, AS N		*****		*****			*****	1.8	7.8	1.8	7.8		0	M
001	5/1/05	5/31/05	120	E.COLI		*****		*****			*****	<2	NL	<2	NL			M
001	4/1/05	4/30/05	120	E.COLI		*****		*****			*****	<2	NL	<2	NL			M
001	3/1/05	3/31/05	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	2/1/05	2/28/05	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	1/1/05	1/31/05	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	12/1/04	12/31/04	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	11/1/04	11/30/04	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	10/1/04	10/31/04	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	9/1/04	9/30/04	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	8/1/04	8/31/04	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	7/1/04	7/31/04	120	E.COLI		*****		*****			*****		NL		NL			M
001	6/1/04	6/30/04	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	5/1/04	5/31/04	120	E.COLI		*****		*****			*****	2.0	NL	2.0	NL		0	M
001	4/1/04	4/30/04	120	E.COLI		*****		*****			*****	<2	NL	<2	NL		0	M
001	3/1/04	3/31/04	120	E.COLI		*****		*****			*****	X	NL	X	NL			M
001	2/1/04	2/29/04	120	E.COLI		*****		*****			*****	X	NL	X	NL			M
001	3/1/09	3/31/09	157	CL2, TOTAL CONTACT		*****		*****		1.1	1.0		*****		*****	MGL	0	M
001	2/1/09	2/28/09	157	CL2, TOTAL CONTACT		*****		*****		1.0	1.0		*****		*****	MGL	0	M
001	1/1/09	1/31/09	157	CL2, TOTAL CONTACT		*****		*****		1.1	1.0		*****		*****	MGL	0	M
001	12/1/08	12/31/08	157	CL2, TOTAL CONTACT		*****		*****		1.0	1.0		*****		*****	MGL	0	M
001	11/1/08	11/30/08	157	CL2, TOTAL CONTACT		*****		*****		1.1	1.0		*****		*****	MGL	0	M
001	10/1/08	10/31/08	157	CL2, TOTAL CONTACT		*****		*****		1.1	1.0		*****		*****	MGL	0	M
001	9/1/08	9/30/08	157	CL2, TOTAL CONTACT		*****		*****		1.2	1.0		*****		*****	MGL	0	M
001	8/1/08	8/31/08	157	CL2, TOTAL CONTACT		*****		*****		1.7	1.0		*****		*****	MGL	0	M
001	7/1/08	7/31/08	157	CL2, TOTAL CONTACT		*****		*****		2.0	1.0		*****		*****	MGL	0	M
001	6/1/08	6/30/08	157	CL2, TOTAL CONTACT		*****		*****		1.2	1.0		*****		*****	MGL	0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	T _{SS}
001	5/1/08	5/31/08	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****	MGL	0	M
001	4/1/08	4/30/08	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****	MGL	0	M
001	3/1/08	3/31/08	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****	MGL	0	M
001	2/1/08	2/29/08	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****	MGL	0	M
001	1/1/08	1/31/08	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****	MGL	0	M
001	12/1/07	12/31/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****	MGL	0	M
001	11/1/07	11/30/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****	MGL	0	M
001	10/1/07	10/31/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****	MGL	0	M
001	9/1/07	9/30/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.4	1.0	*****	*****	*****	*****	MGL	0	M
001	8/1/07	8/31/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****	MGL	0	M
001	7/1/07	7/31/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.4	1.0	*****	*****	*****	*****	MGL	0	M
001	6/1/07	6/30/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.4	1.0	*****	*****	*****	*****	MGL	0	M
001	5/1/07	5/31/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		0.5	1.0	*****	*****	*****	*****	MGL	4	M
001	4/1/07	4/30/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.4	1.0	*****	*****	*****	*****	MGL	0	M
001	3/1/07	3/31/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.0	1.0	*****	*****	*****	*****	MGL	0	M
001	2/1/07	2/28/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.6	1.0	*****	*****	*****	*****	MGL	0	M
001	1/1/07	1/31/07	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****	MGL	0	M
001	12/1/06	12/31/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****	MGL	0	M
001	11/1/06	11/30/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****	MGL	0	M
001	10/1/06	10/31/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****	MGL	0	M
001	9/1/06	9/30/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.0	1.0	*****	*****	*****	*****	MGL	0	M
001	8/1/06	8/31/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.4	1.0	*****	*****	*****	*****	MGL	0	M
001	7/1/06	7/31/06	CL2, TOTAL CONTACT	*****	*****	*****	*****			1.0	*****	*****	*****	*****	MGL		M
001	6/1/06	6/30/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		2.2	1.0	*****	*****	*****	*****	MGL	0	M
001	5/1/06	5/31/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****	MGL	0	M
001	4/1/06	4/30/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****	MGL	0	M
001	3/1/06	3/31/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****		0	M
001	2/1/06	2/28/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****		0	M
001	1/1/06	1/31/06	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****			M
001	12/1/05	12/31/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.7	1.0	*****	*****	*****	*****		0	M
001	11/1/05	11/30/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****		0	M
001	10/1/05	10/31/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.4	1.0	*****	*****	*****	*****		0	M
001	9/1/05	9/30/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.6	1.0	*****	*****	*****	*****			M
001	8/1/05	8/31/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.0	1.0	*****	*****	*****	*****			M
001	7/1/05	7/31/05	CL2, TOTAL CONTACT	*****	*****	*****	*****			1.0	*****	*****	*****	*****			M
001	6/1/05	6/30/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.2	1.0	*****	*****	*****	*****			M
001	5/1/05	5/31/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.1	1.0	*****	*****	*****	*****			M
001	4/1/05	4/30/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.0	1.0	*****	*****	*****	*****			M
001	3/1/05	3/31/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.0	1.0	*****	*****	*****	*****		0	M
001	2/1/05	2/28/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.4	1.0	*****	*****	*****	*****		0	M
001	1/1/05	1/31/05	CL2, TOTAL CONTACT	*****	*****	*****	*****		1.0	1.0	*****	*****	*****	*****		0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	P ID #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	T S S
001	12/1/04	12/31/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.1	1.0		*****		*****		0	M
001	11/1/04	11/30/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.1	1.0		*****		*****		0	M
001	10/1/04	10/31/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.6	1.0		*****		*****		0	M
001	9/1/04	9/30/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.1	1.0		*****		*****		0	M
001	8/1/04	8/31/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.1	1.0		*****		*****		0	M
001	7/1/04	7/31/04	157	CL2, TOTAL CONTACT	*****	*****		*****			1.0		*****		*****			M
001	6/1/04	6/30/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.7	1.0		*****		*****		0	M
001	5/1/04	5/31/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.1	1.0		*****		*****		0	M
001	4/1/04	4/30/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.1	1.0		*****		*****		0	M
001	3/1/04	3/31/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.2	1.0		*****		*****		0	M
001	2/1/04	2/29/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.3	1.0		*****		*****		0	M
001	1/1/04	1/31/04	157	CL2, TOTAL CONTACT	*****	*****		*****		1.2	1.0		*****		*****		0	M
001	12/1/03	12/31/03	157	CL2, TOTAL CONTACT	*****	*****		*****		1.2	1.0		*****		*****		0	M
001	3/1/09	3/31/09	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	2/1/09	2/28/09	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	1/1/09	1/31/09	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	12/1/08	12/31/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	11/1/08	11/30/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	10/1/08	10/31/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	9/1/08	9/30/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	8/1/08	8/31/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	7/1/08	7/31/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	6/1/08	6/30/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	5/1/08	5/31/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	4/1/08	4/30/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	3/1/08	3/31/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	2/1/08	2/29/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	1/1/08	1/31/08	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	12/1/07	12/31/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	11/1/07	11/30/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	10/1/07	10/31/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	9/1/07	9/30/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	8/1/07	8/31/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	7/1/07	7/31/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	6/1/07	6/30/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	5/1/07	5/31/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	2	M
001	4/1/07	4/30/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	3/1/07	3/31/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	2/1/07	2/28/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	1/1/07	1/31/07	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M
001	12/1/06	12/31/06	165	CL2, INST RES MAX	*****	*****		*****				<QL	0.008	<QL	0.01	MGL	0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	P g #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	T g g
001	11/1/06	11/30/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01	MGL	0	M
001	10/1/06	10/31/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01	MGL	0	M
001	9/1/06	9/30/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01	MGL	0	M
001	8/1/06	8/31/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01	MGL	0	M
001	7/1/06	7/31/06	165	CL2, INST RES MAX		*****		*****			*****		0.008		0.01	MGL		M
001	6/1/06	6/30/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01	MGL	0	M
001	5/1/06	5/31/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01	MGL	0	M
001	4/1/06	4/30/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01	MGL	0	M
001	3/1/06	3/31/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01	MGL	0	M
001	2/1/06	2/28/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	1/1/06	1/31/06	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01			M
001	12/1/05	12/31/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	11/1/05	11/30/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	10/1/05	10/31/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	9/1/05	9/30/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01			M
001	8/1/05	8/31/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	7/1/05	7/31/05	165	CL2, INST RES MAX		*****		*****			*****		0.008		0.01			M
001	6/1/05	6/30/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01			M
001	5/1/05	5/31/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01			M
001	4/1/05	4/30/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01			M
001	3/1/05	3/31/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	2/1/05	2/28/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	1/1/05	1/31/05	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	12/1/04	12/31/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	11/1/04	11/30/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	10/1/04	10/31/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	9/1/04	9/30/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	8/1/04	8/31/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	7/1/04	7/31/04	165	CL2, INST RES MAX		*****		*****			*****		0.008		0.01			M
001	6/1/04	6/30/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	5/1/04	5/31/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	4/1/04	4/30/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	3/1/04	3/31/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	2/1/04	2/29/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	1/1/04	1/31/04	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	12/1/03	12/31/03	165	CL2, INST RES MAX		*****		*****			*****	<QL	0.008	<QL	0.01		0	M
001	3/1/09	3/31/09	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****	MGL	0	M
001	2/1/09	2/28/09	213	CL2, INST TECH MIN		*****		*****		1.0	0.6		*****		*****	MGL	0	M
001	1/1/09	1/31/09	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****	MGL	0	M
001	12/1/08	12/31/08	213	CL2, INST TECH MIN		*****		*****		1.0	0.6		*****		*****	MGL	0	M
001	11/1/08	11/30/08	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****	MGL	0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	Ppt #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	TOT
001	10/1/08	10/31/08	213	CL2, INST TECH MIN		*****		*****		1.3	0.6	*****	*****		*****	MGL	0	M
001	9/1/08	9/30/08	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	8/1/08	8/31/08	213	CL2, INST TECH MIN		*****		*****		1.7	0.6	*****	*****		*****	MGL	0	M
001	7/1/08	7/31/08	213	CL2, INST TECH MIN		*****		*****		2.0	0.6	*****	*****		*****	MGL	0	M
001	6/1/08	6/30/08	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	5/1/08	5/31/08	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****	MGL	0	M
001	4/1/08	4/30/08	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****	MGL	0	M
001	3/1/08	3/31/08	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****	MGL	0	M
001	2/1/08	2/29/08	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	1/1/08	1/31/08	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****	MGL	0	M
001	12/1/07	12/31/07	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	11/1/07	11/30/07	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****	MGL	0	M
001	10/1/07	10/31/07	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****	MGL	0	M
001	9/1/07	9/30/07	213	CL2, INST TECH MIN		*****		*****		1.4	0.6	*****	*****		*****	MGL	0	M
001	8/1/07	8/31/07	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****	MGL	0	M
001	7/1/07	7/31/07	213	CL2, INST TECH MIN		*****		*****		1.4	0.6	*****	*****		*****	MGL	0	M
001	6/1/07	6/30/07	213	CL2, INST TECH MIN		*****		*****		1.4	0.6	*****	*****		*****	MGL	0	M
001	5/1/07	5/31/07	213	CL2, INST TECH MIN		*****		*****		0.5	0.6	*****	*****		*****	MGL	1	M
001	4/1/07	4/30/07	213	CL2, INST TECH MIN		*****		*****		1.4	0.6	*****	*****		*****	MGL	0	M
001	3/1/07	3/31/07	213	CL2, INST TECH MIN		*****		*****		1.0	0.6	*****	*****		*****	MGL	0	M
001	2/1/07	2/28/07	213	CL2, INST TECH MIN		*****		*****		1.6	0.6	*****	*****		*****	MGL	0	M
001	1/1/07	1/31/07	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	12/1/06	12/31/06	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	11/1/06	11/30/06	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	10/1/06	10/31/06	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****	MGL	0	M
001	9/1/06	9/30/06	213	CL2, INST TECH MIN		*****		*****		1.0	0.6	*****	*****		*****	MGL	0	M
001	8/1/06	8/31/06	213	CL2, INST TECH MIN		*****		*****		1.4	0.6	*****	*****		*****	MGL	0	M
001	7/1/06	7/31/06	213	CL2, INST TECH MIN		*****		*****			0.6	*****	*****		*****	MGL		M
001	6/1/06	6/30/06	213	CL2, INST TECH MIN		*****		*****		2.2	0.6	*****	*****		*****	MGL	0	M
001	5/1/06	5/31/06	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	4/1/06	4/30/06	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****	MGL	0	M
001	3/1/06	3/31/06	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****		0	M
001	2/1/06	2/28/06	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****		0	M
001	1/1/06	1/31/06	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****		0	M
001	12/1/05	12/31/05	213	CL2, INST TECH MIN		*****		*****		1.7	0.6	*****	*****		*****		0	M
001	11/1/05	11/30/05	213	CL2, INST TECH MIN		*****		*****		1.1	0.6	*****	*****		*****		0	M
001	10/1/05	10/31/05	213	CL2, INST TECH MIN		*****		*****		1.4	0.6	*****	*****		*****		0	M
001	9/1/05	9/30/05	213	CL2, INST TECH MIN		*****		*****		1.6	0.6	*****	*****		*****		0	M
001	8/1/05	8/31/05	213	CL2, INST TECH MIN		*****		*****		1.0	0.6	*****	*****		*****		0	M
001	7/1/05	7/31/05	213	CL2, INST TECH MIN		*****		*****			0.6	*****	*****		*****		0	M
001	6/1/05	6/30/05	213	CL2, INST TECH MIN		*****		*****		1.2	0.6	*****	*****		*****		0	M

Lightfoot Elementary School Wastewater Treatment Plant DMR Data

Outfall	Monitor Start Date	Monitor End Date	P g #	Parameter Description	QTY AVG	Lim Avg	QTY MAX	Lim Max	Qty Unit	CONC MIN	Lim Min	CONC AVG	Lim Avg	CONC MAX	Lim Max	Conc Unit	Ex	Fr Eq
001	5/1/05	5/31/05	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****			M
001	4/1/05	4/30/05	213	CL2, INST TECH MIN		*****		*****		1.0	0.6		*****		*****			M
001	3/1/05	3/31/05	213	CL2, INST TECH MIN		*****		*****		1.0	0.6		*****		*****		0	M
001	2/1/05	2/28/05	213	CL2, INST TECH MIN		*****		*****		1.4	0.6		*****		*****		0	M
001	1/1/05	1/31/05	213	CL2, INST TECH MIN		*****		*****		1.0	0.6		*****		*****		0	M
001	12/1/04	12/31/04	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****		0	M
001	11/1/04	11/30/04	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****		0	M
001	10/1/04	10/31/04	213	CL2, INST TECH MIN		*****		*****		1.6	0.6		*****		*****		0	M
001	9/1/04	9/30/04	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****		0	M
001	8/1/04	8/31/04	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****		0	M
001	7/1/04	7/31/04	213	CL2, INST TECH MIN		*****		*****			0.6		*****		*****			M
001	6/1/04	6/30/04	213	CL2, INST TECH MIN		*****		*****		1.7	0.6		*****		*****		0	M
001	5/1/04	5/31/04	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****		0	M
001	4/1/04	4/30/04	213	CL2, INST TECH MIN		*****		*****		1.1	0.6		*****		*****		0	M
001	3/1/04	3/31/04	213	CL2, INST TECH MIN		*****		*****		1.2	0.6		*****		*****		0	M
001	2/1/04	2/29/04	213	CL2, INST TECH MIN		*****		*****		1.3	0.6		*****		*****		0	M
001	1/1/04	1/31/04	213	CL2, INST TECH MIN		*****		*****		1.2	0.6		*****		*****		0	M
001	12/1/03	12/31/03	213	CL2, INST TECH MIN		*****		*****		1.2	0.6		*****		*****		0	M

5/22/2009 3:51:58 PM

Facility = Lightfoot Elementary School
Chemical = Total Residual Chlorine
Chronic averaging period = 4
WLAa = 19
WLAc = 11
Q.L. = 100
samples/mo. = 30
samples/wk. = 8

Summary of Statistics:

observations = 1
Expected Value = 200
Variance = 14400
C.V. = 0.6
97th percentile daily values = 486.683
97th percentile 4 day average = 332.758
97th percentile 30 day average = 241.210
< Q.L. = 0
Model used = BPJ Assumptions, type 2 data

A limit is needed based on Chronic Toxicity
Maximum Daily Limit = 16.0883226245855
Average Weekly limit = 9.59676626920107
Average Monthly Limit = 7.9737131838758

The data are:

200

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated wastewater into a water body in Orange County, Virginia.

PUBLIC COMMENT PERIOD: XXX, 2009 to 5:00 p.m. on XXX, 2009

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit – Wastewater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: Orange County School Board, 200 Dailey Drive
Orange, VA 22960, VA0062961

NAME AND ADDRESS OF FACILITY: Lightfoot Elementary School Wastewater Treatment Plant, 11360 Zachary Taylor Highway, Unionville, Virginia 22567

PROJECT DESCRIPTION: Orange County School Board has applied for a reissuance of a permit for the public Lightfoot Elementary School Wastewater Treatment Plant. The applicant proposes to release treated wastewater from residential areas at a rate of 0.004 million gallons per day into a water body. Sludge from the treatment process will be taken to the Massaponax Wastewater Treatment Plant (VA0025658) in Spotsylvania County, Virginia for proper disposal. The facility proposes to release treated sewage in the unnamed tributary to Riga Run, in Orange County in the York River watershed. A watershed is the land area drained by a river and its incoming streams. The permit will limit the following pollutants to amounts that protect water quality: pH, BOD₅, Chlorine, Total Suspended Solids; dissolved oxygen, Ammonia, and *E.coli*.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. DEQ may hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: The public may review the documents at the DEQ-Northern Regional Office by appointment.

Name: Joan C. Crowther

Address: DEQ-Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193

Phone: (703) 583-3925 E-mail: joan.crowther@deq.virginia.gov Fax: (703) 583-3821

**State "Transmittal Checklist" to Assist in Targeting
Municipal and Industrial Individual NPDES Draft Permits for Review**

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: Lightfoot Elementary School Wastewater Treatment Plant
 NPDES Permit Number: VA00062961
 Permit Writer Name: Joan C. Crowther
 Date: May 28, 2009

Major []

Minor [X]

Industrial []

Municipal [X]

I.A. Draft Permit Package Submittal Includes:

	Yes	No	N/A
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?	X		
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?			X
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?	X		
8. Whole Effluent Toxicity Test summary and analysis?			X
9. Permit Rating Sheet for new or modified industrial facilities?			X

I.B. Permit/Facility Characteristics

	Yes	No	N/A
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet or permit contain a description of the wastewater treatment process?	X		
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	
6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet or permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water? Not directly; <i>E.coli</i> TMDL impaired segment downstream from facility's discharge point in Terrys Run. Permit contains an effluent limitation and monitoring requirement <i>E.coli</i> .		X	
a. Has a TMDL been developed and approved by EPA for the impaired water?			X
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?			X
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?	X		
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?		X	

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Checklist – for POTWs (To be completed and included in the record only for POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet or permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether “antibacksliding” provisions were met for any limits that are less stringent than those in the previous NPDES permit?	X		

II.C. Technology-Based Effluent Limits (POTWs)	Yes	No	N/A
1. Does the permit contain numeric limits for <u>ALL</u> of the following: BOD (or alternative, e.g., CBOD, COD, TOC), TSS, and pH?	X		
2. Does the permit require at least 85% removal for BOD (or BOD alternative) and TSS (or 65% for equivalent to secondary) consistent with 40 CFR Part 133?	X		
a. If no, does the record indicate that application of WQBELs, or some other means, results in more stringent requirements than 85% removal or that an exception consistent with 40 CFR 133.103 has been approved?			X
3. Are technology-based permit limits expressed in the appropriate units of measure (e.g., concentration, mass, SU)?	X		
4. Are permit limits for BOD and TSS expressed in terms of both long term (e.g., average monthly) and short term (e.g., average weekly) limits?	X		
5. Are any concentration limitations in the permit less stringent than the secondary treatment requirements (30 mg/l BOD5 and TSS for a 30-day average and 45 mg/l BOD5 and TSS for a 7-day average)?		X	
a. If yes, does the record provide a justification (e.g., waste stabilization pond, trickling filter, etc.) for the alternate limitations?			X

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the fact sheet indicate that any WQBELs were derived from a completed and EPA approved TMDL?	X		
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a “reasonable potential” evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the “reasonable potential” evaluation was performed in accordance with the State’s approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have “reasonable potential”?	X		
d. Does the fact sheet indicate that the “reasonable potential” and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations)?	X		
e. Does the permit contain numeric effluent limits for all pollutants for which “reasonable potential” was determined?	X		